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PART II.—ADVANCED

MODERN GYMNASTIC EXERCISES

BY

A. ALEXANDER

OR OF THE LIVERPOOL GYMNASIUM.

p. 21 a.

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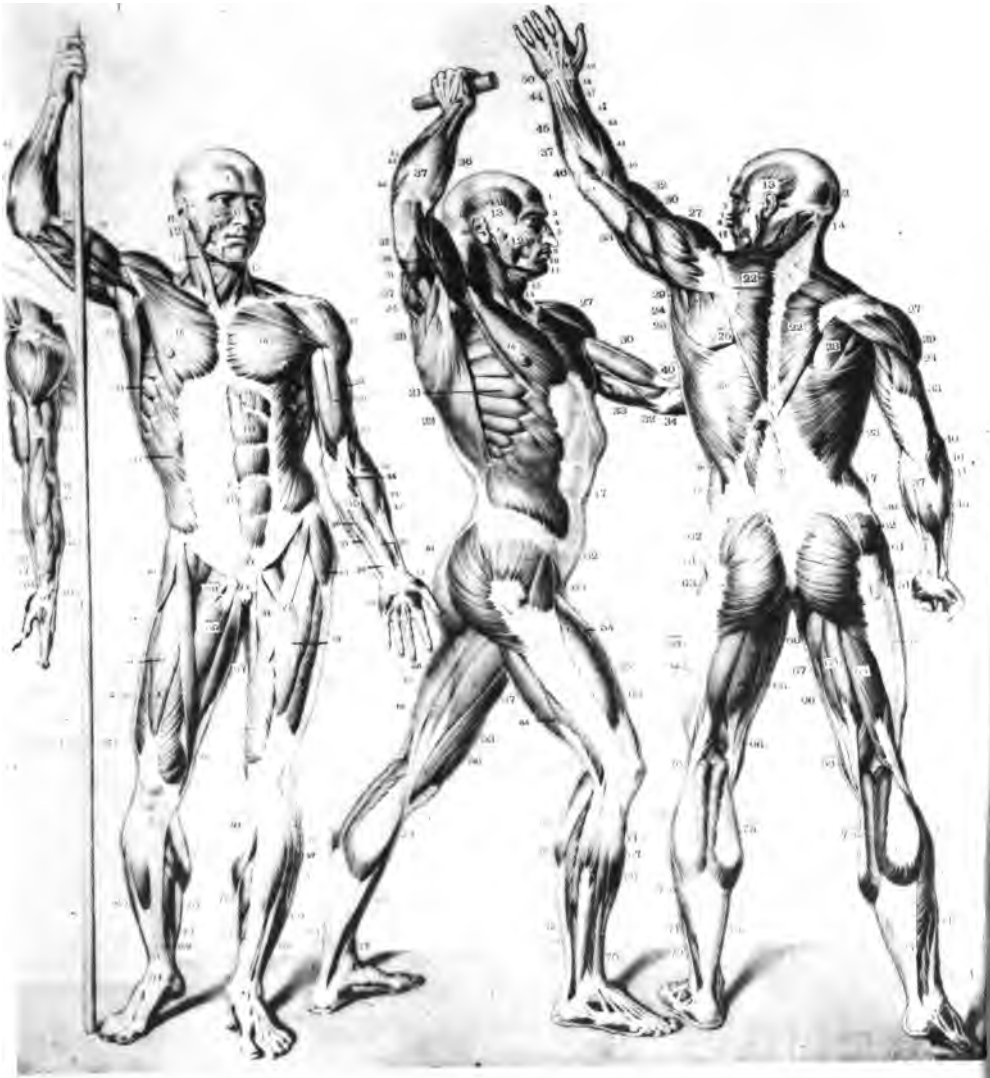
ANATOMICAL FIGURES.



The Numbers denote the various Muscles, and are referred to throughout the book.

MODERN

GYMNASTIC EXERCISES,

PART II. (ADVANCED).

BY

A. ALEXANDER, F.R.G.S.,

Director of the Liverpool Gymnasium. Author of "Musical Drill for Infants," "Healthful Exercises for Girls," &c. &c.

WITH A PREFACE BY

THE RIGHT HONOURABLE THE EARL OF MEATH,

AND

270 ILLUSTRATIONS by B. E. TAPLIN.

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TO

THE RIGHT HONOURABLE THE EARL OF MEATH,

IN ADMIRATION

OF HIS UNTIRING AND UNREMITTING EFFORTS ON BEHALF OF
THE PHYSICAL CONDITION OF THE WORKING CLASSES,

THIS VOLUME IS DEDICATED,

BY HIS MOST OBEDIENT AND HUMBLE SERVANT,

THE AUTHOR.

PREFACE.

MR. ALEXANDER has asked me to write a short preface to his book. If any words of mine can be of service to him in driving still further home into the brain of the average Briton a conviction of the necessity of looking to the physical health and strength of the masses of his countrypeople, these words are at his disposal. For no one can feel with greater intensity than I do, that if Great Britain allows her city populations to accumulate within narrow limits, crowded together, without providing them with the means of exercising the limbs and muscles with which they have been endowed by Providence, the day will come when she will regret that, whilst accumulating wealth, she omitted to surround herself with the strong arms and steady nerves necessary to defend that wealth.

The Upper and Middle Classes can strengthen their bodies, and acquire the manly virtues of courage and endurance in the hunting field, on the river, in the football and cricket ground; but the children of the sons of toil who have the misfortune to be born in large cities, what can they do to improve their physical condition? How are they to grow in health and strength? Deprived of air and proper exercise, confined within close and unventilated rooms, with no playground better than the gutter or the reeking court—for these it is imperative that the nation should provide not only playgrounds, which must of necessity always be small and cramped, but school gymnasia for the use of both sexes; at which attendance shall be compulsory for all healthy children, and which shall be thrown open of an evening for a small payment to those older lads and maidens who, having passed their compulsory course, are wise

enough to prefer to spend their evenings in the pursuit of health and strength, rather than in the atmosphere—weakening to both mind and body—of the music hall and the gin palace.

I hail the appearance of this work as a valuable addition to the social literature of the day, and trust that the words of Mr. Alexander (than whom there are few, if any, within the bounds of this Kingdom more entitled to speak upon this subject with authority) may sink into the ears of the British public, and bear fruit, to the advantage of the community and the state.

MEATH.

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OUR MUSCULAR SYSTEM.

In this work—which is solely intended for persons who wish to obtain physical benefit, and who, already having some knowledge of physical training, desire to derive additional pleasure in practising its advanced stages—we do not presume to teach physiology or anatomy, material for which is fully supplied in the many able works published by the medical press; but as an artizan who wishes to repair or improve a motive engine must have some knowledge of its construction before he can effectually commence his work, so we offer this little chapter in the hope that it may be of benefit to gymnastic students in finding out the connection between their work and the motive power which enables them to perform that work. For instance, as an illustration, let us try and shew the connection between the muscular system and a standing high jump, which, although a simple feat, calls into play—some, of course, more violently than others—a greater variety of muscles than can be mentioned in a brief chapter like this. Notice the athlete when he is about to spring: his head and shoulders are thrown forwards, his arm backwards, the body leans over the thighs, while the legs are bent on the thigh, and the feet on the legs. Suddenly the head is thrown erect by the Trapezius and certain muscles running from the spine to the back of the head, the fists are clenched by the flexors of the fingers, the arms raised by the Trapezius, Deltoid, Pectoral, and other muscles. The trunk is straightened out by the spinal erectors, the thigh assumes a straight line with the trunk by the Gluteal muscles. The Quadriceps Extensor extend the legs forcibly on the thighs, while the

strong calf muscles straighten the feet. All these actions, violently and simultaneously performed, launch the body into the air. Then immediately the "hamstring" muscles and flexors bend the feet and double up the legs, the abdominal, with some of the deeper muscles bend the thighs and pelvis, and the athlete clears the obstacle. Then comes a repetition of the straightening process, and the ground is reached.

Raising the chin to the level of a bar by the aid of one arm, a feat only performed by the very strong, illustrates the action of quite a different set of muscles. In this case the gymnast, by contraction of the muscles situated on the front of the forearm, grasps the bar with his fingers, and hangs suspended. By a powerful effort the Biceps and Brachialis Anticus bend the forearm, while the great Pectoral, Latissimus Dorsi and other muscles draw the upper arm to the side, and the chin is raised to the level of the bar. Other actions are more briefly described in the subjoined list; the parallel numbers on the anatomical figures will give the locality of the muscles.

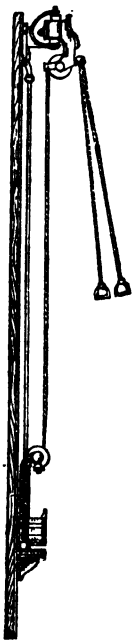
NAMES OF THE MUSCLES.	THEIR PRINCIPAL ACTIONS.
1.—Occipito-frontalis, frontal portion 2.— Do. occipital do.	Wrinkles the forehead, raises the eyebrows, and moves the scalp.
3.—Orbicularis palpibrarum 4.—Pyramidalis-nasi 5.—Compressor nasi 6.—Levator labii superioris alaeque nasi 7.—Zygomaticus minor 8.— Do. major 9.—Orbicularis oris 10.—Depressor anguli oris 11.—Depressor labii inferioris	These muscles act on the eyelids, nose, and mouth, and cause by their action the various changes of expression in the face.
12.—Masseter 13.—Temporal	Muscles of mastication, they raise the lower jaw against the upper.
14.—Sterno cleido mastoid	The two muscles acting together depress the head on the neck, and the neck on the chest.
15.—Infra-hyoid muscles	Depress the larynx, &c., and are used in swallowing.
16.—The great Pectoral	Draws the arm across the chest.—When the arm is fixed it enlarges the cavity of the chest; also draws the body forwards when suspended by the hands.

NAMES OF THE MUSCLES.	THEIR PRINCIPAL ACTIONS.
17.—External oblique of the abdomen	See other abdominal muscles.
18.—The linea alba	The line of division between the abdominal muscles.
19.—Rectus muscle of the abdomen	The abdominal muscles are greatly used in gymnastics—they draw the lower part of the body up as in climbing—double up the body in somersault throwing, &c. They are also expiratory muscles.
20.—Pyramidalis do.	
21.—Serratus magnus	Assists the Pectorals in enlarging the chest.
22.—Trapezius	The upper fibres raise the shoulder as in supporting weights; the Trapezius muscles also carry the head directly backwards when both sides act.
23.—Latissimus Dorsi	Draws the body forwards when suspended by hands, and assists the abdominal muscles and Great Pectorals in climbing, &c. When arm not fixed it draws it backwards and downwards.
24.—Teres major	When the arm is raised it draws it downwards and backwards, and rotates it inwards. Draws the body forwards when the arm is fixed.
25.—Rhomboideus major.....	Draws the shoulder-blades backwards and straightens the shoulders.
26.—Sacro lumbalis and Longissimus dorsi...	Keep the spine erect, and acting further, hollow the back.
27.—Deltoid	Raises the arm at right angles with the body, as in dumb-bells, &c.
28.—Infra spinatus	Rotate the arm outwards. When the arm is raised they keep it in that position, at the same time bring it backwards.
29.—Teres minor	
30.—Biceps.....	Bends the forearm on the arm, and when the forearm is fixed bends the arm upon the forearm as in "slow pull up."
31.—Coraco-Brachialis	Draws the arm upwards and forwards.
32.—Brachialis Anticus	Assists the action of the Biceps.
33.—Triceps	"The Boxer's Muscle," straightens the forearm as in striking, and slow rise into hands-balance from bent arms, &c.
34.—Pronator Radii Teres	Turns the palm of the hand downwards.
35.—Flexor carpi Radialis	Bends the hand on the forearm.
36.—Palmaris Longus	Makes tense the strong fascia of the palm.
37.—Flexor carpi ulnaris.....	Assists the Flexor carpi radialis, &c.
38.—Flexor sublimus digitorum	Bends the fingers and thumb, and continuing their action, flex the wrist.
39.— Do. Longus pollicis.....	
40.—Supinator Longus.....	Turns the palm upwards.
41.—Extensor Carpi radialis Longior	Extend the hands and the fingers, and thus antagonize the action of the flexors. Best brought into play by the Indian Clubs.
42.— Do. do. do. Brevior	
43.— Do. Communis Digitorum.....	
44.— Do. Minimi Digiti	
45.— Do. Carpi ulnaris	
46.—Anconeus	Assists the Triceps.
47.—Extensor ossis metacarpi pollicis	Extend the thumb. They are specially developed in those who use the Indian Clubs.
48.— Do. primi Internodii do.	
49.— Do. secundi do. do.	

NAMES OF THE MUSCLES.	THEIR PRINCIPAL ACTIONS.
50.—Posterior Annular Ligament of wrist ...	Serve to bind down and form sheaths for the Extensor tendons.
51.—Thenar eminence	The ball of the Thumb.
52.—Hypothenar do.	The do. Little Finger.
53.—Sartorius.....	The "Tailor's Muscle," flexes and crosses the legs.
54.—Rectus.....	These with the Crureus form the great "Quadriceps Extensor" of the leg upon the thigh. They also maintain the erect position in standing by steadying the thigh upon the legs, and the trunk upon the thigh, in conjunction with other muscles used also in jumping.
55.—Vastus Externus	
56.— Do. Internus.....	
57.—Gracilis	Assists the Sartorius.
58.—Pectineus	Draw the legs together. Should be well developed in all well-taught gymnasts who do NOT perform their feats with their legs like a pair of compasses.
59.—Adductor Longus	
60.— Do. Magnus.....	
61.—Gluteus Maximus.....	The muscles of the buttocks, raise the body from the stooping position and keep it erect. Draw the thigh backwards as in a "lay out" somersault; assisted by the Erectors of the spine.
62.— Do. Medino	
63.—Tensor Vaginæ femoris and Fascia Lata	The strong fascia of the thigh and its tensor muscle.
64.—Biceps.....	Form the Hamstring muscles (and its tensor muscle); they bend the leg on the thigh, and help to maintain the erect position in standing—used in hanging by the hocks or heels.
65.—Semi-Tendinosus	
66.—Semi-Membranosus	
67.—Tibialis Anticus	Extend the toes and flex the ankle. They also keep the legs erect over the feet in standing.
68.—Extensor Proprius Pollicis	
69.— Do. Longus Digitorum	
70.—Peroneus Tertius	
71.— Do. Longus	Extend the foot and steady the leg. Are brought into play in balancing on one foot.
72.— Do. Brevis	
73.—Gastrocnemius	Form the muscles of the "calf" of the leg. They are used in walking, jumping, and a variety of exercises. The Tendo Achillis is the tendon by which the Soleus and Gastrocnemius are inserted into the heel, which they raise from the ground in walking, &c.
74.—Tendo Achillis	
75.—Soleus	
76.—Plantaris.....	
77.—Flexor Longus Digitorum	Bends the toes, and acting further, assist the last-mentioned set of muscles.
78.—Extensor Brevis do.	Assists and modifies the action of the Long Extensor (No. 69).
79.—Abductor Pollicis.....	Draws the big toe towards the others.
80.—Abductor Minimi Digiti	Do. little do. do.

MODERN GYMNASTIC EXERCISES.

CHAPTER I.—HOW TO GET STRONG.



"How to get strong," is an oft-repeated question, a problem that has proved despairing to every one except enthusiastic youth, to whom the thousand and one methods are but welcome novelties to his fiery tastes. But what about the elderly ones, the busy ones, the brain-worker, our boys and girls, the delicate ones, and those who cannot attend a gymnasium, and whose common sense tells them that if they wish to preserve their health and *life* they *must* take exercise of some sort. It is to this class as well as to Athletes who wish to keep "in form" that we dedicate this present chapter. First obtain the apparatus, and do not allow its simplicity to dishearten you. It is but an arrangement of noiseless pulleys and cords, with graduated weights, to suit man, woman, or child, mounted upon a thin board; a screw, top and bottom, secures it to the back of your bedroom door; and there you are, independent of Gymnasium Instructors, critics, and accidents; and Strength and Health, with their attendant pleasures, are within your reach. Frequency of movement should be aimed at, rather than endeavouring to work with a heavy weight, and this is best done with a *light* weight. At first the machine should only be worked for a couple of minutes; but as the pupil gets stronger, 5 or 10 minutes once or twice a day will be found to steadily develop the frame.

A word to gymnasts. It is a bad plan to rush into the Gymnasium and immediately attempt advanced exercises or gymnastic feats. The muscles have been in repose, and such a rude awakening will not tend to keep them in good order. If you are a careful observer, you will notice that sudden efforts produce rapid exhaustion.

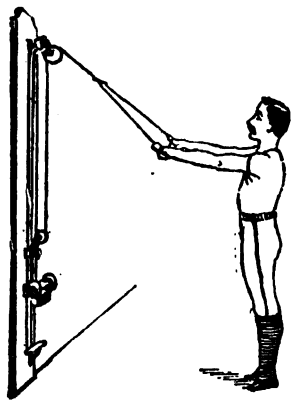


Fig. 1.

Exercise 1.—There are innumerable exercises which can be worked upon this little machine which we have no space to describe in this limited chapter, but which will doubtless suggest themselves to the experienced gymnast. It will be sufficient for our purpose if we give a few general exercises that will gradually get the muscles into activity and working order. FACE, therefore, the machine, taking a handle in each hand, and simply pull the handles towards you until the hands touch the chest. This exercise will develop the *flexors* of the forearm and the muscles of the back, see Fig. 1. Twisting the hands outwards and inwards will develop the *rotator* muscles; or by pressing the elbows against the sides, and continuing the twisting movement, exercise the *rotators* and *biceps* muscles. *See Anatomical figure, Nos. 23, 30, 32, 34, 40.*

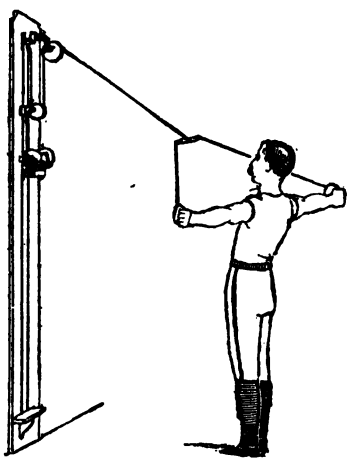


Fig. 2.

Exercise 2.—Here is a good exercise for the *Chest, Back,* and *Shoulders.* FACE the machine with the hands in front, as in Fig. 1, twist the hands until the palms face, then keeping the arms stiff, bring them outwards until they are level and in a line with the shoulders, see Fig. 2; then steadily allow the weight to bring the arm back into the starting position. Vary this exercise by, when commencing, facing the palms of the hands outwards, then with stiff arms bring them outwards until level with the shoulders as before. In this and in other ways that will suggest themselves a variety of exercises can be obtained which cannot well be obtained upon other apparatus without experiencing some discomfort.

See Anatomical figure, Nos. 22, 23, 25, 27.

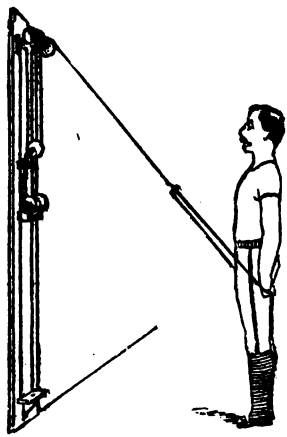


Fig. 3.

Exercise 3.—Another exercise especially good for the back and chest. Commence as in Fig. 1, but instead of bringing the arms outwards, keep the arms stiff and bring them downwards to the sides, knuckles to the front, see Fig. 3; then gradually allow the weight to bring the arms up again to the starting position. Repeat this exercise, keeping the palms of the hands to the front. Commence also as in Fig. 1, perform the first exercise, then into the position of Fig. 2, and finally that of Fig. 3. These exercises performed alternately will be found to meet the general requirements of the arm muscles. *See Anatomical figure, Nos. 16, 23, 24, 25.*

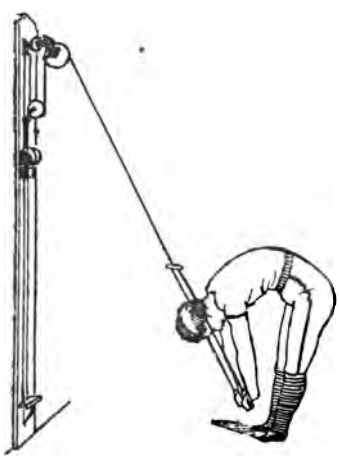


Fig. 4.

Exercise 4.—Watching an athlete one evening at a provincial gymnasium, performing with easy grace the exercise depicted in Fig. 4, a prominent member of the Town Council, who was equally prominent for an abnormally stout waist, exclaimed with great fervour, "I would give £100 if I could do that!" It certainly must be an inconvenience not to be able, by reason of stoutness, to tie one's shoe-strings. Had our aldermanic friend practised the above exercises occasionally, he might have remained more shapely. THIS exercise should be commenced from position of Fig. 1, then, allowing the weight to bring the arms above the head, the pupil should bend forwards and downwards from the waist until close to the ground; the knees and arms should be kept stiff. This will be an efficient exercise for the *abdominal* muscles, and will tend to impart suppleness to the frame.

See Anatomical figure, Nos. 17, 19, 20.

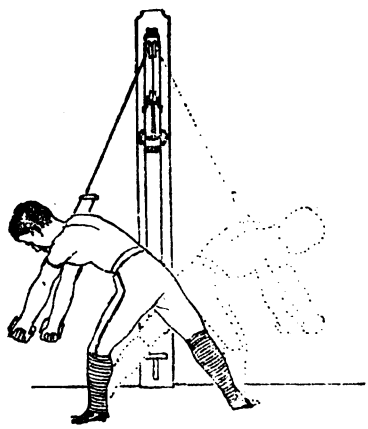


Fig. 5.

Exercise 5.—This is excellent practice for exercising many parts of the body which do not receive any benefit when practising upon the ordinary apparatus of the gymnasium. STAND before the machine with the feet apart, hands above the head; now slowly bring the handles down until they pass the left knee, then gradually allow them to ascend over the head again as at starting, when bring the handles steadily down past the right knee, as incated by the dotted figure (see Fig. 5).

See Anatomical figure, Nos. 17, 19, 20, 27.

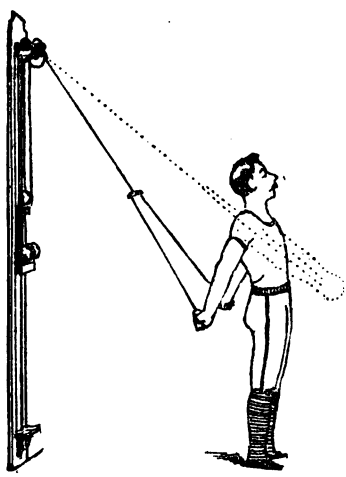


Fig. 6.

Exercise 6.—The preceding set of exercises have dealt principally with the muscles of the *back* and *abdomen*, as well as those of the arms. The present and following exercises are principally intended to develop a variety of other muscles, as well as the preceding. COMMENCE by placing your back to the machine; bringing the arms down by the side, as shewn in Fig. 6; now bring the hands steadily to the front into the position of the dotted lines, then allow the weight to bring the arms back again to the starting position. This is good practice for shoulders, chest, and *extensors* of arms. Perform the same exercises with *bent* arms—good work for the *biceps*, and, by straightening the arms in front, equally good for the *triceps*.

See Anatomical figure, Nos. 16, 30, 31, 32, 33.

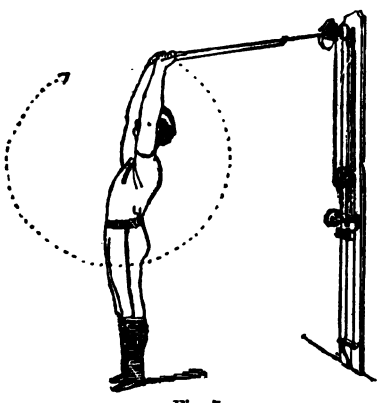


Fig. 7.

Exercise 7.—This is a good exercise for the *chest, shoulders* and *back*. AFTER performing the preceding exercise, continue the movement with the arms stiff until the arms are above the head, as seen in Fig. 7, then bring the arms outwards and downwards, passing the sides, and continue this rotary movement until the arms reach the position of Fig. 7 again. Another excellent practice is to commence from position of Fig. 7, and bring the arms outwards and downwards until the hands are by the sides; reverse the movement by raising the arms outwards and upwards until above the head again.

Anatomical figure, Nos. 16, 22, 23, 27.

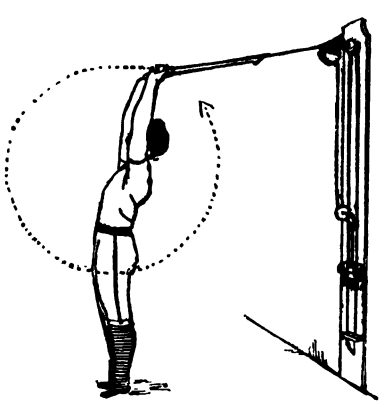


Fig. 8.

Exercise 8.—WHEN in the position of Fig. 8, bring the arms forwards and downwards, palms of the hands being to the front, until the arms are close to the sides, and allow the weight to bring the arms backwards and upwards until the starting point is reached. Vary by performing a rotary movement first in one direction and then reversing it. A good exercise, though a little severe, is COMMENCING from Fig. 8, and keeping the arms above the head, bend sideways from the waist, first to the right and afterwards to the left side.

Anatomical figure, Nos. 16, 22, 23, 27.

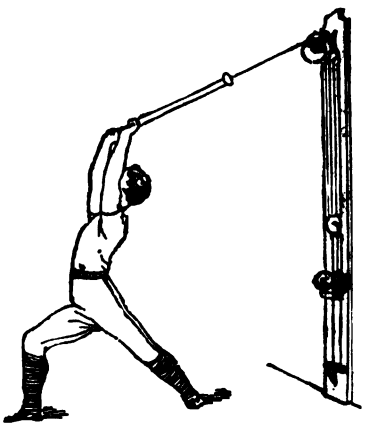


Fig. 9.

Exercise 9. — Commence from the position of Fig. 6, only the arms must be close to the sides; in one simultaneous movement spring out into the position of Fig. 9, the right foot advanced, the right knees bent; the feet should be at right angles, the left leg stiff; the body and arms should be perpendicular, with the head thrown well back; the arms should be raised above the head at the same time that the foot is advanced. In springing back to the starting position, the arms should describe a semicircle backwards until they reach the sides, as in Fig. 7, closing the heels at the same time. *Anatomical figure, Nos. 22, 27, 53, 57, 58, 59, 60.*

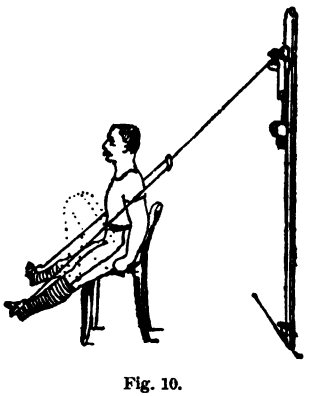


Fig. 10.

Exercise 10.—When the joints of the limbs are damaged or weak, they give considerable trouble, and cause much irritation in taking a long time to get well and strong. This is in many cases due to persistence in attempting to walk, just to see if you are any stronger than you were yesterday, and so on; but we recommend in the above cases as much rest as possible, and bathing, with friction if the inflammation is chronic. When you feel you are a little stronger, it would be well to sit on a chair and exercise the leg muscles gently before putting the entire weight of the body upon it. COMMENCE by placing both handles upon one foot, with a light weight on the pulley; extend and draw the knee up to the chest. Change by placing, if required, on the other foot, and vary by placing a handle upon each foot, extending the legs, and drawing up the knees as indicated by the dotted outline in Fig. 10. *Anatomical figure, Nos. 54, 55, 56.*

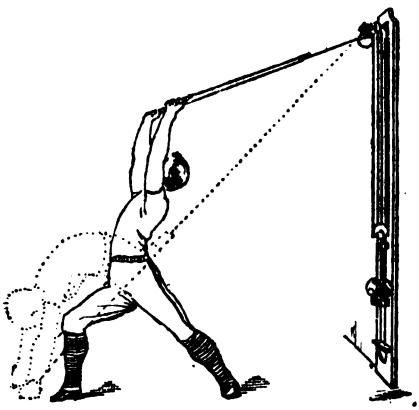


Fig. 11.

Exercise 11.—COMMENCE as in Fig. 9, but get into the position slowly and easily. Now bend from the waist only, throwing the weight of the body on the right foot until the body assumes the position indicated by the dotted figure; then rise steadily until in the starting position again, keeping the arms stiff. After working about six times, change by bringing the left foot forward; vary also by, when in the bending position, extending the arms outwards as the body becomes erect until the starting position is reached.

Anatomical figure, Nos. 23, 27, 17, 19, 20.

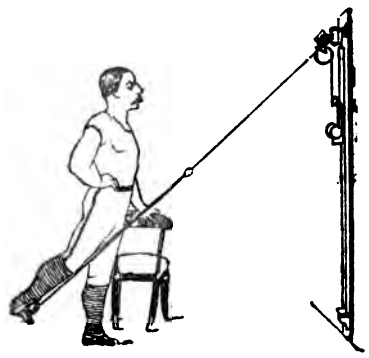


Fig. 12.

Exercise 12.—The knee is certainly the most troublesome of all the joints on account of its constantly working—bearing the weight of the body—thus giving it little rest. If the knee is swollen, bathe with hot water, into which put a tablespoonful of tincture of arnica. After the swelling has disappeared, take rest and apply cold bandages; and when feeling stronger, in addition to the previous exercises mentioned, PLACE both handles on the foot of the injured leg, and, steadying yourself by holding on to the back of the chair, bring the knee to the chest, and gently extend the foot backward, as in Fig. 12. Should the case be one of weakness, the above exercises will be found useful in gradually developing the muscles, and bracing them up for greater exertion.

Anatomical figure, Nos. 17, 19, 20, 54, 55, 56.

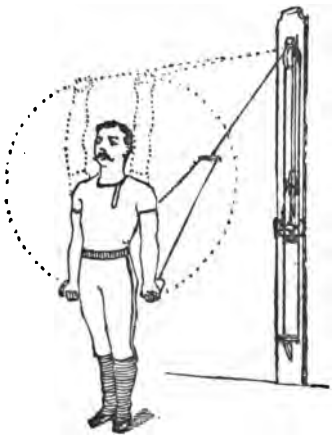


Fig. 13.

Exercise 13.—STAND as in Fig, 13, and, keeping the arms stiff, raise them gradually forward until over the head—see dotted lines; at this point extend the arms outwards and downwards until the starting point is reached. Vary by reversing the movement, *i.e.*, keeping the arms stiff and raising them outwards and upwards until above the head, then bring them forwards and downwards until the sides are reached. Another exercise principally benefitting the arms is to bend from the elbows, placing the hands on the shoulders, then thrust them above the head, bring them to the shoulders again, and eventually to the sides. *Anatomical figure, Nos. 16, 23, 24, 27, 30, 33.*

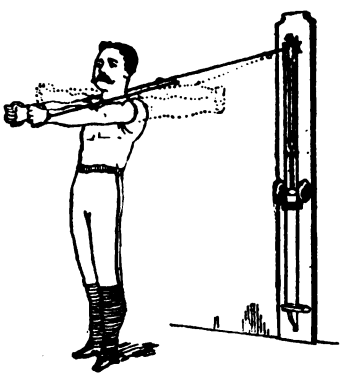


Fig. 14.

Exercise 14. — COMMENCE with the arms down by the sides, raise them in front until level with the shoulders, palms of the hands facing each other; now allow the weight to bring the arms backwards until slightly in the rear of the shoulders, see Fig. 14, bring the arms to the front again and repeat the movement. This is a splendid exercise for chest and back. Of course there are plenty of other exercises with this machine, but, as we have already pointed out, we have described sufficient for our purpose. We strongly recommend even the advanced gymnast, as we do everyone, to commence their work at the gymnasium by five minutes at this little machine—it serves to relax the joints, and braces the muscles in a safe and comfortable way for more advanced work. *Anatomical figure, Nos. 16, 22, 23, 25, 27, 28, 29.*

LIGHT DUMB-BELL EXERCISES.

The exercises treated of in this chapter were specially arranged for the Liverpool Gymnasium "Champion Eight," viz.: R. E. Thomas, D. Macdonald, W. O. Milner, A. E. Jones, C. E. Allot, J. Beckett, H. Davies, and H. V. Boote, who represented their gymnasium in the National Gymnastic Championship at Olympia, London, in 1887, against Exeter Hall Gymnasia, Aberdeen, and other clubs. The judges, Colonel S. M. Onslow, H.M.I. of Military Gymnasia, and J. M. Hubbard, Director of the Birmingham Gymnasium, awarded 93 points out of a possible 96, being the highest number awarded, and which no doubt largely aided the Liverpool men in winning the championship upon that occasion. They, it must be explained, performed the exercises without any rest or pause, the music playing continuously. Although this is not a very difficult matter for trained gymnasts, we should not feel justified in advising this course without the necessary gradual preparation. The "Light Dumb-bell Exercises" being principally intended for developing the trunk of the body, and making the limbs supple, the dumb-bells should not be heavy. Hardwood bells, with wide, circular turned ends, are the most suitable.

LIGHT DUMB-BELL EXERCISES.

1st EXERCISE.

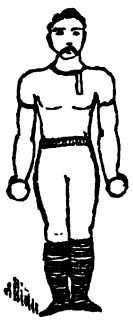


Fig. 1.

WORDS OF COMMAND (to be used by Instructor).—Attention—Twist the Bells.

DIRECTIONS (for pupil).—At the word "Attention"—see Fig. 1—bring the heels together, toes pointing outwards, head and shoulders well back, arms by the sides, body erect. At the words "Twist the bells," twist the bells first outwards and then inwards, towards the body. Continue 8 times.

PRINCIPAL MUSCLES EXERCISED—Rotators of the arms.
See Anatomical figure, Nos. 30, 34, and 40.

MUSICAL TIME—waltz.

2nd EXERCISE.

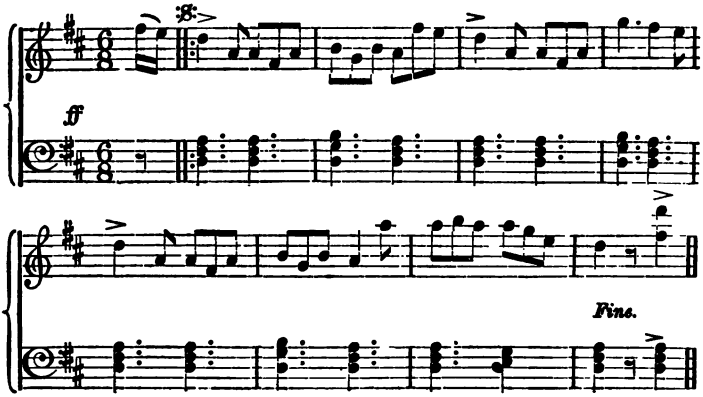
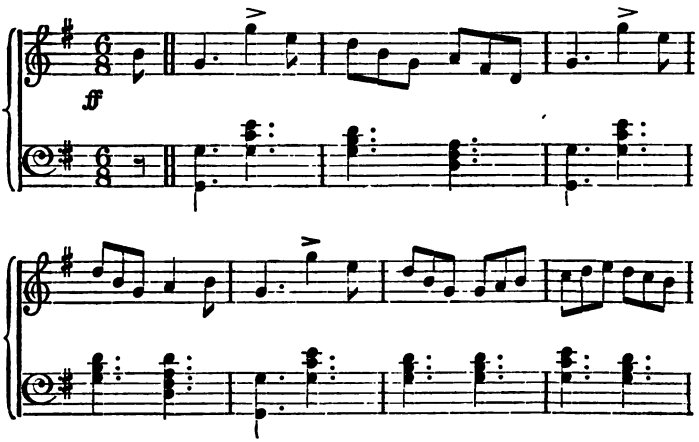
Fig. 2.

On the Instructor giving the word "Change," the pupil will make a Right Turn, facing to the right, at the same time bringing up the elbows to his sides—see Fig. 2—and continuing the twisting movement with his hands 8 times. The elbows should be pressed against the sides, and the fore-arms to move only, the rest of the body to be kept rigid.

PRINCIPAL MUSCLES EXERCISED—Rotators of the arms.
See Anatomical figure, Nos. 30, 34, and 40.

MUSICAL TIME—waltz.

1st EXERCISE.

TWIST THE BELLS. *(By permission of the "Musical Million."*

2nd EXERCISE.

LIGHT DUMB-BELL EXERCISES.

3rd EXERCISE.

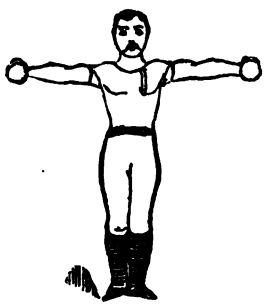


Fig. 3.

At the word of command "Change," the pupil should make another right turn, facing the rear from the starting point, at the same time extending the arms outwards and sideways, and level with the shoulders—see Fig. 3—continuing the twisting movement with the hands 8 times. The arms alone should move, the body being kept perfectly rigid.

PRINCIPAL MUSCLES EXERCISED—Elevators and Rotators of the arms.

See Anatomical figure, Nos. 22, 27, 34, 40.

MUSICAL TIME—waltz.

4th EXERCISE.

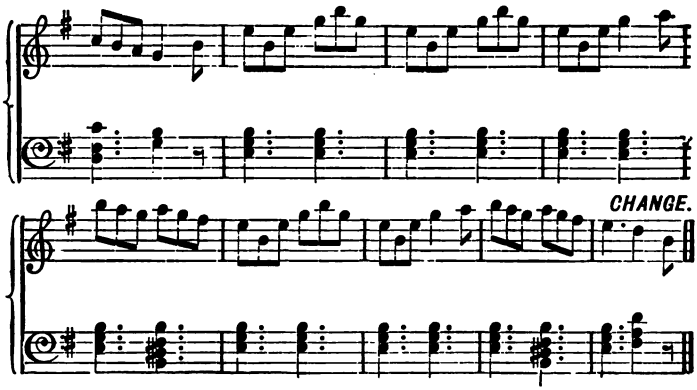
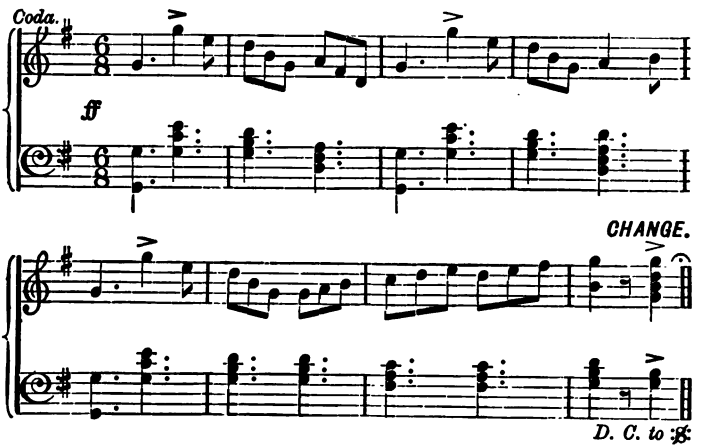
Fig. 4.

At the next "Change," the pupil will make another Right turn, facing the right side of the room from the starting point, and at the same time raise the arms above the head, keeping them stiff, perpendicular, and parallel, looking up at the bells — see Fig. 4 — continuing the twisting movement as before 8 times.

PRINCIPAL MUSCLES EXERCISED — Elevators and Rotators of the arms.

See Anatomical figure, Nos. 22, 27, 28, 29, 34, 40.

MUSICAL TIME—waltz.

3rd EXERCISE.

4th EXERCISE.

LIGHT DUMB-BELL EXERCISES.

5th EXERCISE.

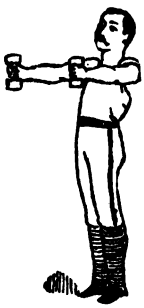


Fig. 5.

At the next "Change," the pupil will make another Right turn, facing the front, as at the starting point, at the same time raising and extending the arms in front until they are horizontal and parallel—see Fig. 5—and continuing the twisting movement as before 8 times. On the conclusion of this series of arm movements resume the position of ATTENTION.

PRINCIPAL MUSCLES EXERCISED—Rotators, Deltoid, Pectorals, &c.

See Anatomical figure, Nos. 16, 27, 34, 40.

MUSICAL TIME—waltz.

6th EXERCISE.

Fig. 6.

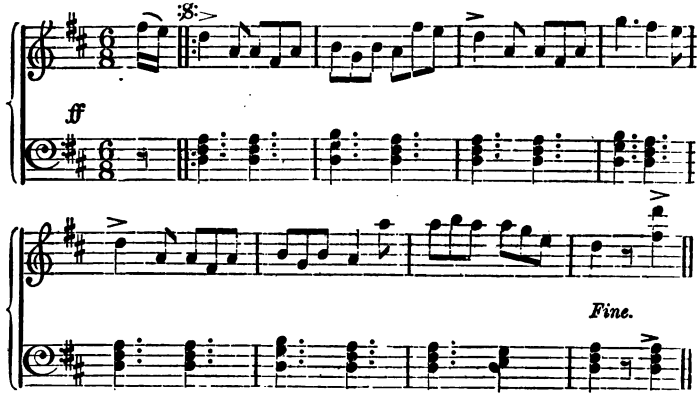
At the word of command, "Bend Sideways, Right," the pupil will bend sideways, at the same time raising the right arm above the head and thrusting the left arm down by the side—see Fig. 6—heels to be kept well together, toes pointing outwards, and bending from the waist only.

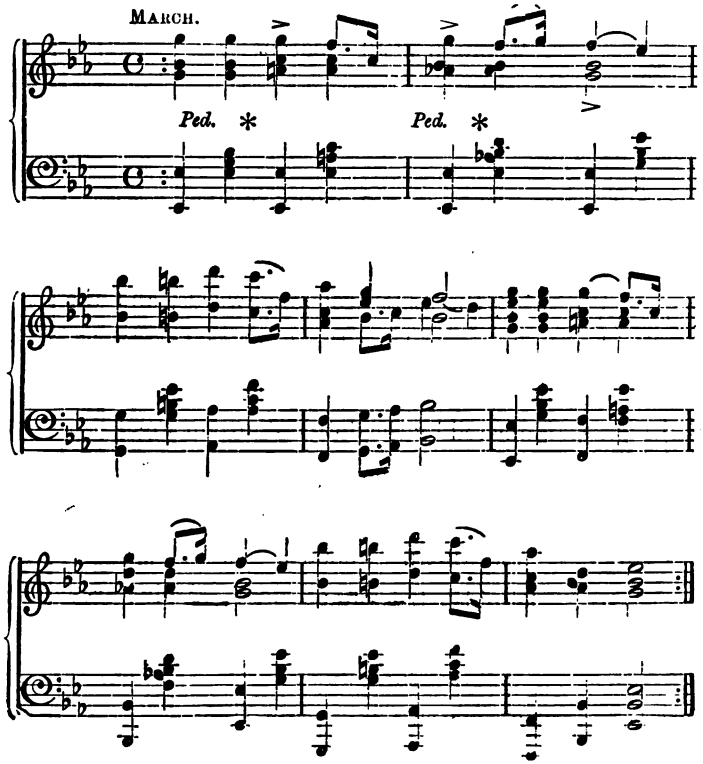
PRINCIPAL MUSCLES EXERCISED — Deltoids, Pectorals, Latissimus dorsi, Teres major, and other muscles.

See Anatomical figure, Nos. 22, 26, 27, 28, 29.

MUSICAL TIME—march.

5th EXERCISE.

(By permission of the "Musical Million."

6th EXERCISE.

BEND SIDEWAYS. *By permission of the "Musical Million."*

LIGHT DUMB-BELL EXERCISES.

7th EXERCISE.

Fig. 7.

At the word "Left," the pupil will reverse the movement, raising the Left arm above the head, and thrusting the Right down by the side —see Fig. 7. Continue this movement with the preceding one 16 times. Be careful to bend sideways from the waist as before.

PRINCIPAL MUSCLES EXERCISED—Same as in No. 6.

See Anatomical figure, Nos. 22, 26, 27, 28, 29.

MUSICAL TIME—march.

8th EXERCISE.

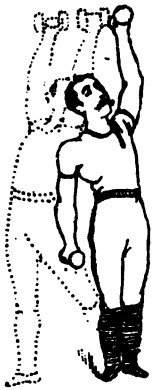


Fig. 8.

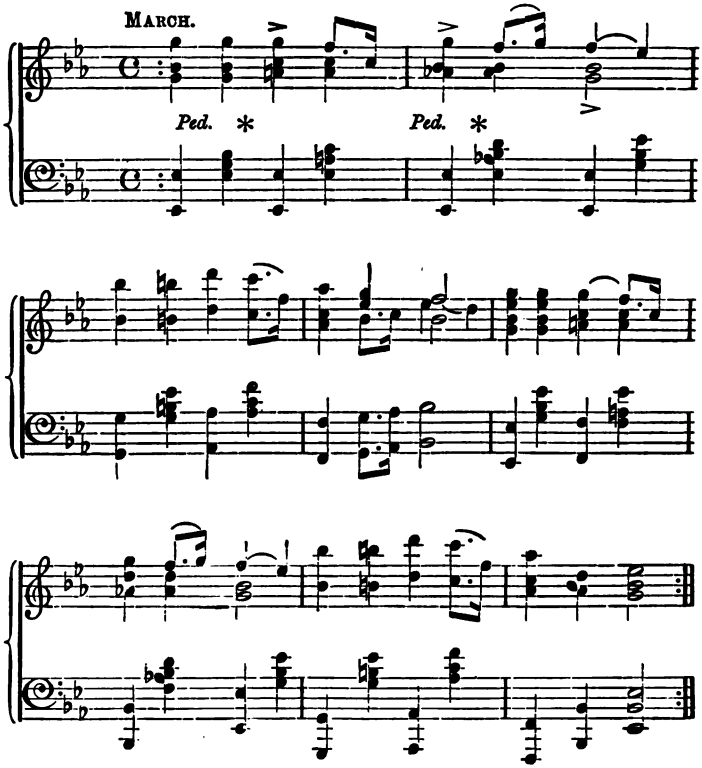
At the word "Swing Right," the pupil will bring the Left arm downwards, and then raise both arms above the head to the Right side, at the same time making one face to the Right as indicated by the dotted figure in Fig. 8; following up the movement by bringing the Left foot up to the Right until the heels are close together.

PRINCIPAL MUSCLES EXERCISED — Pectorals, Deltoids, Latissimus dorsi, Adductors of the thighs.

See Anatomical figure, Nos. 16, 22, 23, 27, 28, 29, 59, and 60.

MUSICAL TIME—march.

7th EXERCISE.

(By permission of the "Musical Million."

8th EXERCISE.—Same as above.

LIGHT DUMB-BELL EXERCISES.

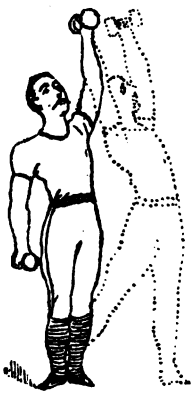


Fig. 9.

9th EXERCISE.

At the word "Left," the pupil will swing both arms downwards and then above the head to the Left side, at the same time reversing the movement of the feet by making a pace to the Left side as shewn by the dotted figure in Fig. 9, and bringing the Right foot up to the Left. Continue this with the preceding movement alternately 16 times. The body should be kept rigid.

PRINCIPAL MUSCLES EXERCISED—Pectorals, Deltoids, Latissimus dorsi, and Adductors of the thighs.

See Anatomical figure, Nos. 16, 22, 23, 27, 28, 29, 59, 60.

MUSICAL TIME—march.

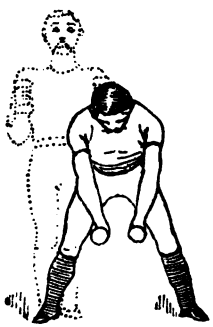


Fig. 10.

10th EXERCISE.

At the word of command, "Bend," the pupil will place the Right foot sideways apart, and at the same time bend from the waist—see Fig. 10—until the bells are between the feet; the knees and arms to be kept stiff, toes pointing outwards. Bring the bells as near to the ground as possible.

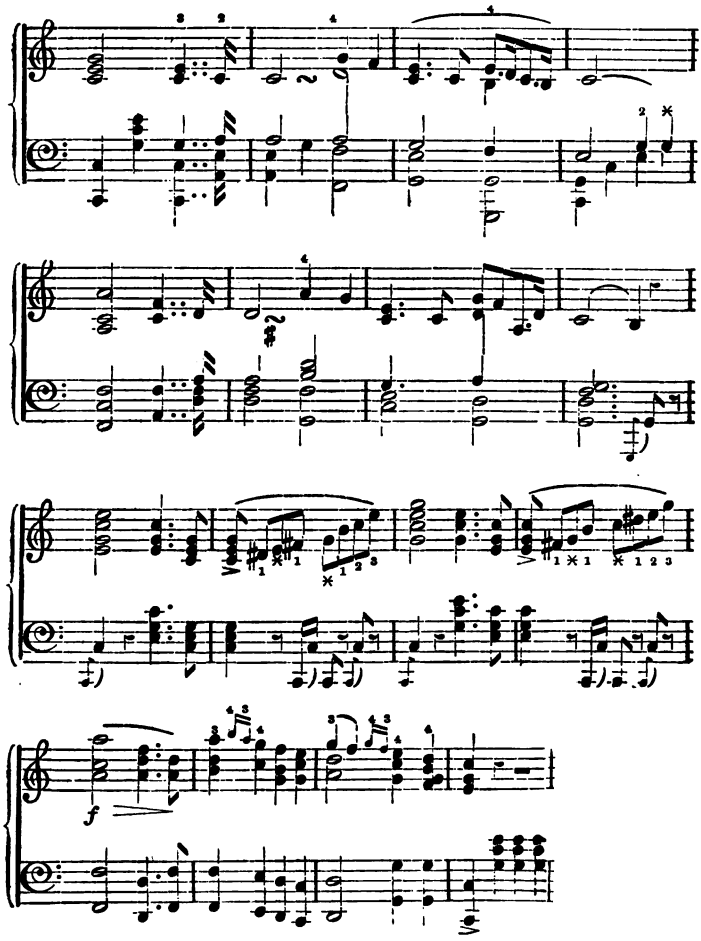
PRINCIPAL MUSCLES EXERCISED—Abdominal muscles.

See Anatomical figure, Nos. 17, 19, 20.

MUSICAL TIME—march.

9th EXERCISE.—Same as 7th Exercise.

10th EXERCISE.

By permission of the "Musical Million."

LIGHT DUMB-BELL EXERCISES.

11th EXERCISE.

Fig. 11.

At the word "One," the pupil should bring the Left foot up to the Right, stand erect, bring the bells to the chest, and assume the position indicated by the dotted figure in Fig. 10. At the word "Two," the bells should be thrust above the head as in Fig. 11, body to be kept rigid. At the word "Three," the bells should be brought to the chest again, as in the dotted figure of Fig. 10.

PRINCIPAL MUSCLES EXERCISED—Spinal and Gluteal muscles, Triceps, and Deltoids.

See Anatomical figure, Nos. 26, 27, 33, 61, 62.

MUSICAL TIME—march.

12th EXERCISE.

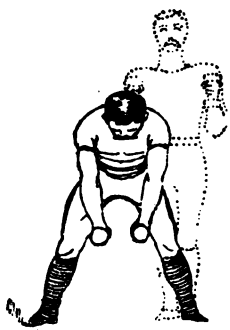


Fig. 12.

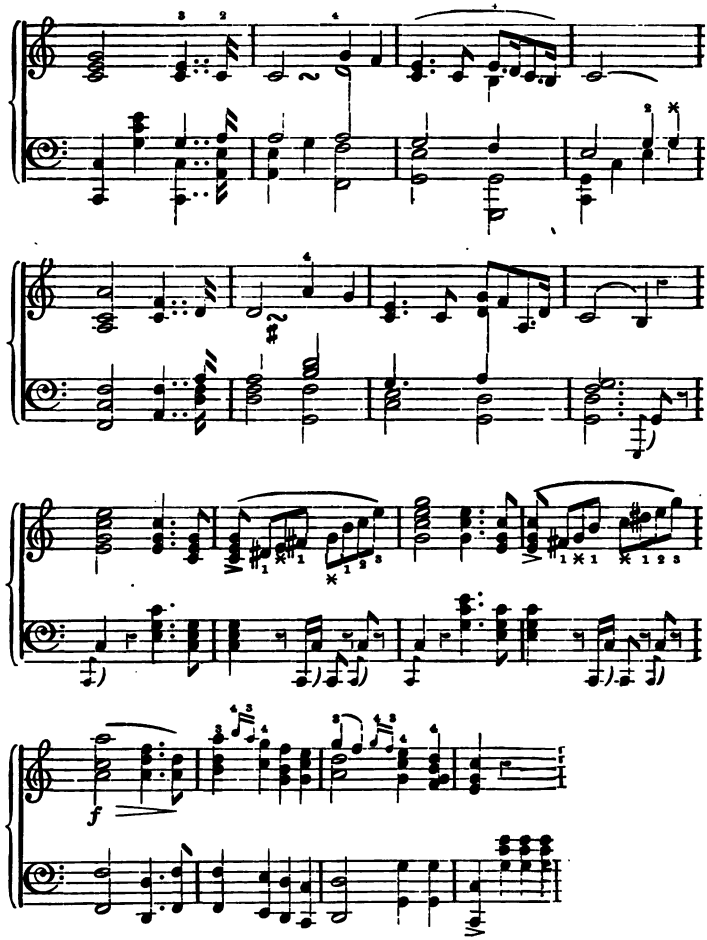
At the word "Four," the Left foot should be placed sideways apart, the pupil at the same time bending—see Fig. 12—until the bells are between the feet. At the word "One," the Right foot should be closed up to the Left, the body brought erect, the bells to the chest—see dotted figure in Fig. 12. At the word "Two," the bells should be raised above the head—see Fig. 11. At the word "Three," bring the bells back to the chest. Repeat these movements 16 times.

PRINCIPAL MUSCLES EXERCISED—Gluteal, Spinal, Deltoids, Triceps, and Abdominal muscles.

See Anatomical figure, Nos. 17, 19, 20, 26, 27, 33, 61, 62

MUSICAL TIME—march.

11th EXERCISE.

By permission of the "Musical Million."

12th EXERCISE—Same as above.

LIGHT DUMB-BELL EXERCISES.

13th EXERCISE.

Fig. 13.

At the word "Swing Right," swing the arms from above the head, downwards from the Left side up to above the head on the Right side; at the same time bring the Right foot apart from the Left sideways, left heel to be raised, body arched backwards, and eyes looking up to the bells—see Fig. 13.

PRINCIPAL MUSCLES EXERCISED—Pectorals, Deltoids, muscles of the spine, and calf of leg.

See Anatomical figure, Nos. 16, 26, 27, 73, 75, 76.

MUSICAL TIME—march.

14th EXERCISE.

Fig. 14.

At the word "LEFT," reverse the movement by swinging the arms downwards and upwards to the Left side—see Fig. 14—arms and legs to be kept stiff, and position of body as before. Perform this and the preceding exercise 16 times. Be careful not to have the feet too much apart in this exercise, but just a medium distance of about 15 inches, much depending upon the physique.

PRINCIPAL MUSCLES EXERCISED—Pectorals, Deltoids, and muscles of spine and calf of leg.

See Anatomical figure, Nos. 16, 26, 27, 73, 75, 76.

MUSICAL TIME—march.

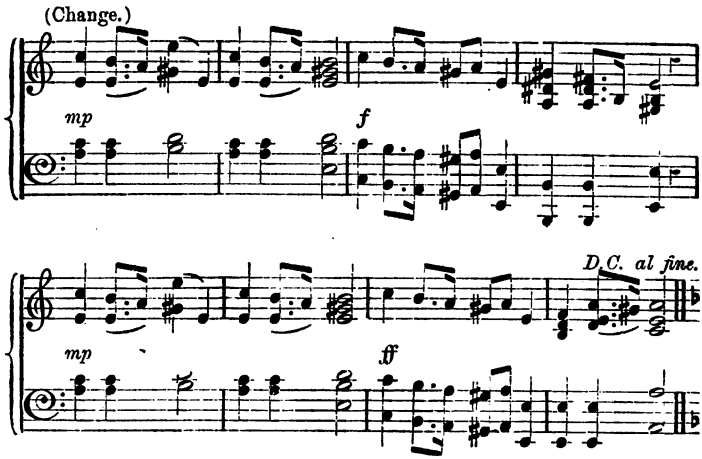
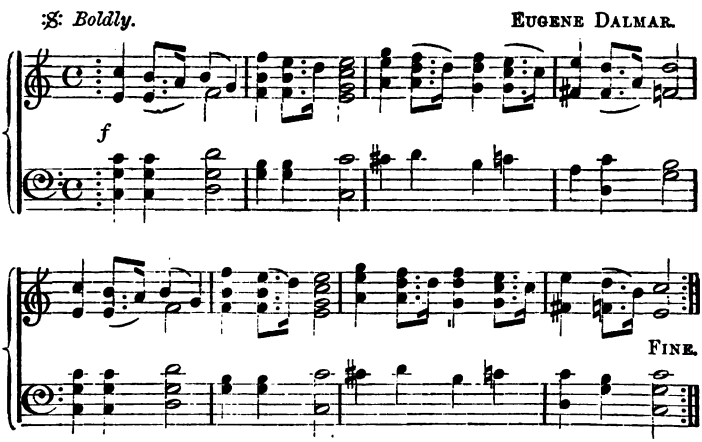
13th EXERCISE.

14th EXERCISE.

LIGHT DUMB-BELL EXERCISES.

Fig. 15.

15th EXERCISE.

At the word "Bend Right," bring the bells from above the head at the Right side down to the outside of the Right foot, Right knee to be bent, Left leg stiff—see Fig. 15. At the word "One," raise the body erect, bring the bells to the chest, keeping the feet apart. At the word "Two," raise the bells above the head, keeping the arms stiff.

PRINCIPAL MUSCLES EXERCISED—Abdominal, Spinal, Gluteal, Pectoral, Triceps, and Deltoid muscles, and Quadriceps Extensors.

See Anatomical figure, Nos. 16, 17, 19, 20, 26, 27, 33, 54, 55, 56, 61, 62.

MUSICAL TIME—march.

Fig. 16.

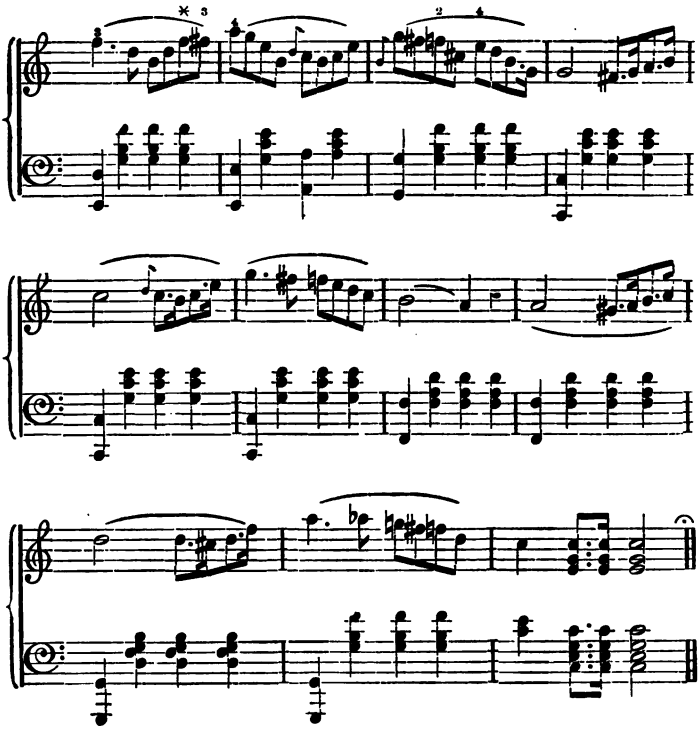
16th EXERCISE.

At the word "Three," bring the bells from above the head to the chest, keeping the body rigid. At the word "Four," place the bells at the outside of the Left foot, bending the Left knee only, and keeping the Right leg stiff—see Fig. 16. Perform the whole of this movement 16 times.

PRINCIPAL MUSCLES EXERCISED—Abdominal, Spinal, Gluteal, Pectoral, and Deltoid muscles, and Quadriceps Extensors.

See Anatomical figure, Nos. 16, 17, 19, 20, 26, 27, 33, 54, 55, 56, 61, 62.

MUSICAL TIME—march.

15th EXERCISE.

16th EXERCISE—Same as above.

LIGHT DUMB-BELL EXERCISES.

17th EXERCISE.

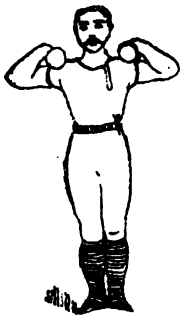


Fig. 17.

At the word "Shoulders," bring the bells from the position of attention until the bells are upon the shoulders, palms of the hands downwards—as in Fig. 17. Bells to be kept together, toes pointing outwards, body erect, and head and shoulders kept well back in this and the following arm movements. Care should be taken to exercise the arms only, the body not moving.

PRINCIPAL MUSCLES EXERCISED—Biceps, and Brachialis Anticus.

See Anatomical figure, Nos. 27, 30, 32.

MUSICAL TIME—galop.

18th EXERCISE.

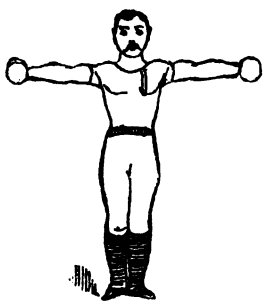


Fig. 18.

At the word "Outwards," extend the arms outwards and sideways, keeping them stiff and level with the shoulders, palms of the hands upwards, a firm hold of the bells kept, body erect, head and shoulders well back. Be careful not to drop the arms below the level of the shoulders.

PRINCIPAL MUSCLES EXERCISED—Triceps and Anconeus.

See Anatomical figure, Nos. 27, 33, 46.

MUSICAL TIME—galop.

17th EXERCISE.

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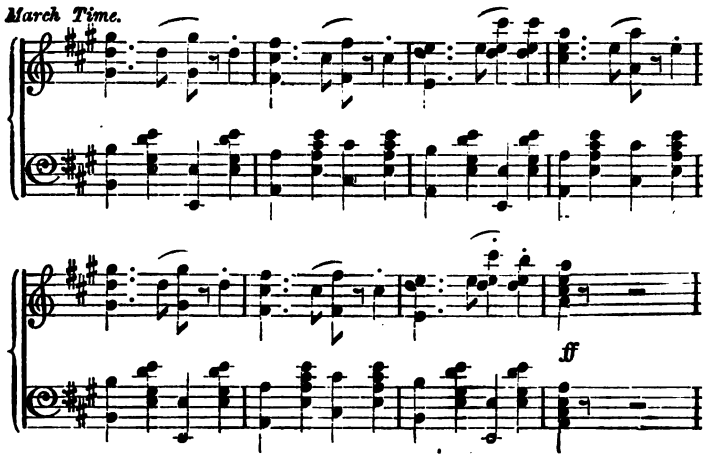
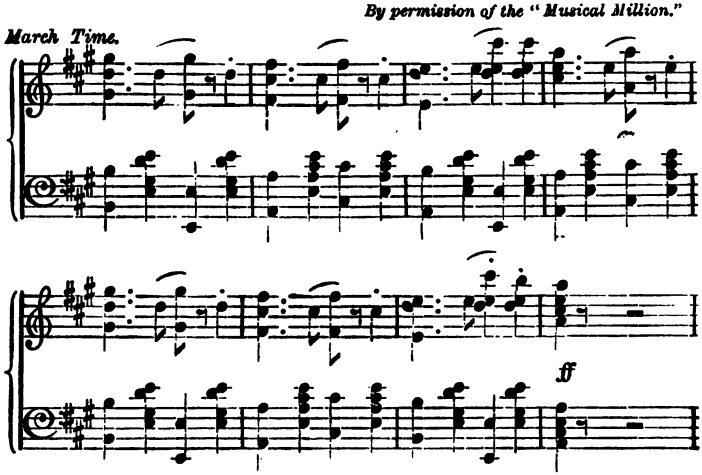

18th EXERCISE.

By permission of the "Musical Million."

LIGHT DUMB-BELL EXERCISES.

19th EXERCISE.

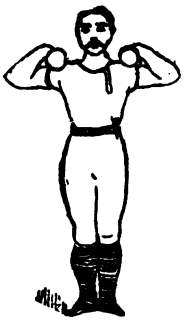


Fig. 19.

At the word "Shoulders," bring the bells upon the shoulders again by bending the arms from the elbows, and bringing the bells upwards and downwards on to the shoulders; the upper part of the arms to be kept level with the shoulders, and body rigid as before—see Fig. 19.

PRINCIPAL MUSCLES EXERCISED—Same as in Exercise 17.

See Anatomical figure, Nos. 27, 30, 32.

MUSICAL TIME—galop.

20th EXERCISE.

Fig. 20.

At the word "Upwards," raise the bells above the head until the arms are parallel, perpendicular, and stiff; the ends of the bells should be to the front, the body to be kept erect as before, the head thrown well back, and the eyes looking up at the bells. Endeavour to keep the body immovable, making the movement from the arms only.

PRINCIPAL MUSCLES EXERCISED—Extensors of arms.

See Anatomical figure, Nos. 27, 33, 46.

MUSICAL TIME—galop.

19th EXERCISE.

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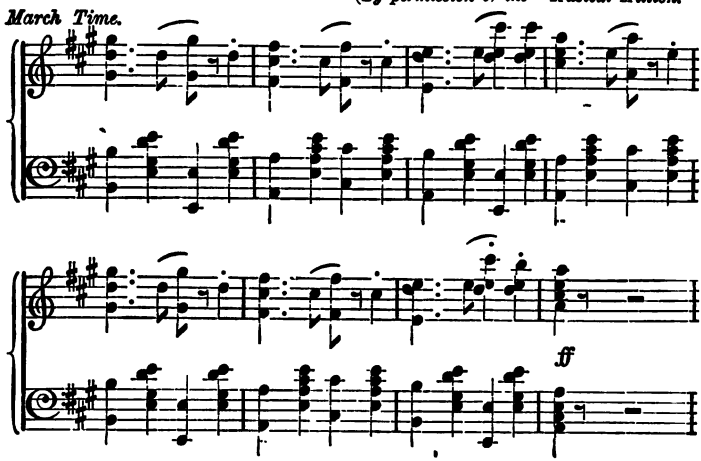
20th EXERCISE.

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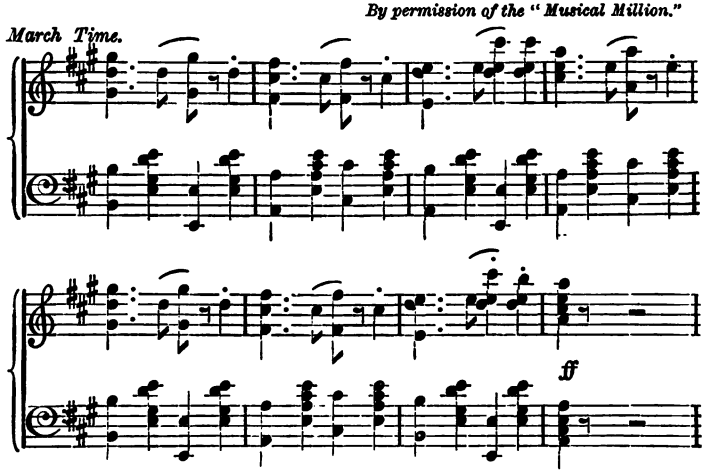


LIGHT DUMB-BELL EXERCISES.

21st EXERCISE.

Fig. 21.

At the word "Chest," bring the bells from above the head to the chest, keeping the elbows well back and close to the side, and the bells also rather to the side—see Fig. 21. The bells should be held in the perpendicular position, the body erect and immovable as before, the movement being made from the arms only.

PRINCIPAL MUSCLES EXERCISED—Pectorals, muscles of the back, and the Biceps.

See Anatomical figure, Nos. 23, 30, 32.

MUSICAL TIME—galop.

22nd EXERCISE.

Fig. 22.

At the word "Forwards," thrust the bells forwards until the arms are horizontal and parallel with each other—see Fig. 22. At the word "Backwards," bring the arms vigorously backwards into the position of Fig. 21 again, after which, re-commence from position of attention. These series of arm movements should be performed 32 times.

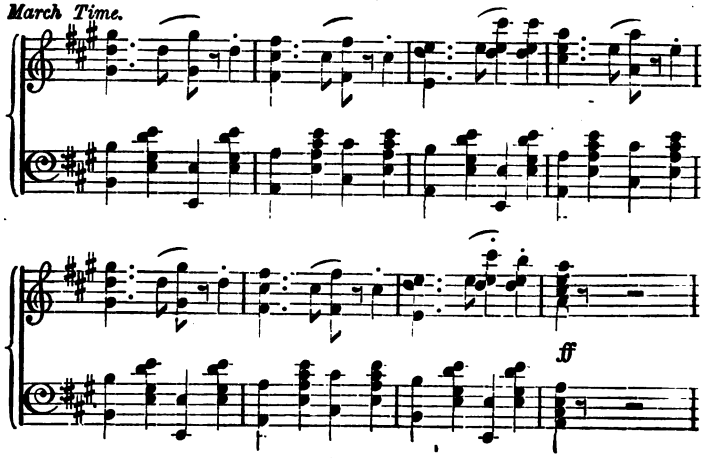
PRINCIPAL MUSCLES EXERCISED—Triceps, Anconeus, Biceps, Latissimus Dorsi.

See Anatomical figure, Nos. 23, 30, 33, 46.

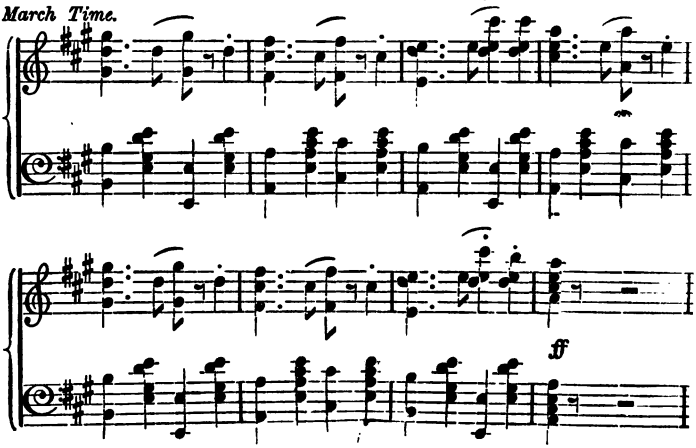
MUSICAL TIME—galop.

21st EXERCISE.

(By permission of the "Musical Million."

March Time.

22nd EXERCISE.

By permission of the "Musical Million."

March Time.

LIGHT DUMB-BELL EXERCISES.

23rd EXERCISE.

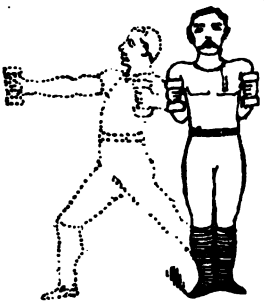


Fig. 23.

At the word of command "Chest," bring the bells smartly to the chest. At the word "Right Lunge," step out with the Right foot and at the same time strike vigorously forwards with the Right arm—see Fig. 23. At the word "Left," bring the Right arm back again and thrust the left arm vigorously forward, performing the movements alternately 16 times.

PRINCIPAL MUSCLES EXERCISED—Extensors of arms.

See Anatomical figure, Nos. 33, 46.

MUSICAL TIME—galop.

24th EXERCISE.

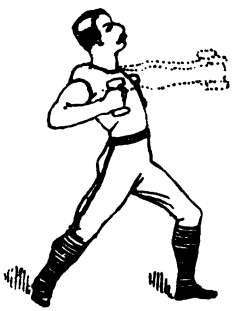


Fig. 24.

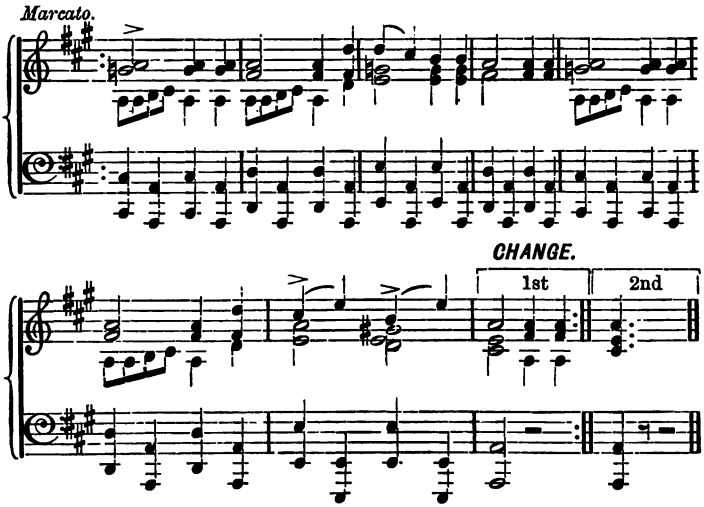
At the word "Change," twist around from the waist and face the Left side. At the word "Forwards," extend the arms forwards—as shewn in the dotted lines of Fig. 24. At the word "Backwards," bring both arms vigorously backwards until the bells reach the sides—as seen in Fig. 24. Continue this movement 16 times.

PRINCIPAL MUSCLES EXERCISED—Extensors of the arms.

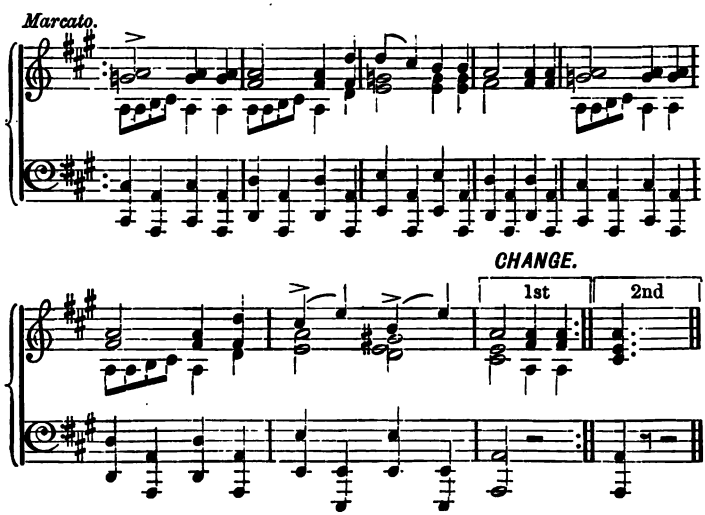
See Anatomical figure, Nos. 33, 46.

MUSICAL TIME—galop.

23rd EXERCISE.



24th EXERCISE.



LIGHT DUMB-BELL EXERCISES.

25th EXERCISE.

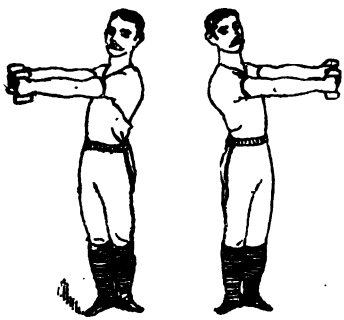


Fig. 25.

At the words "Raise the Arms," the pupil, from the position of attention, will raise his arms until they are horizontal and parallel in front of the shoulders; and then, keeping the heels closed, at the word "SWING" he will swing the arms around first to the Right and afterwards to the Left side—see Fig. 25. Perform the movement 16 times.

PRINCIPAL MUSCLES EXERCISED—Trapezius, Latissimus Dorsi, Deltoid, and Pectorals.

See Anatomical figure, Nos. 16, 22, 23, 27.

MUSICAL TIME—waltz.

26th EXERCISE.

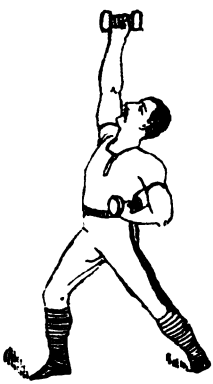
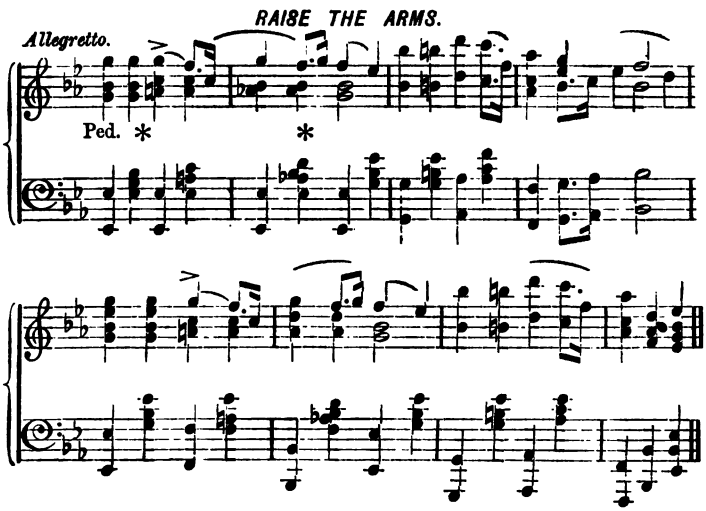


Fig. 26.

At the words "Charge, Right Side," the pupil will, from the position of attention, step out to the Right side with the Right foot, at right angles with the left, the advanced knee only to be bent, the left leg stiff. Simultaneously the Right arm should be raised above the head and kept stiff. The pupil should look up at the bell, and place his left hand upon the left hip—see Fig. 26. At the word "RECOVER," resume the position of "attention."

MUSCLES EXERCISED—The greater part of the muscular system.

MUSICAL TIME—march.

25th EXERCISE.

26th EXERCISE.—Same as 27th Exercise

LIGHT DUMB-BELL EXERCISES.

27th EXERCISE.

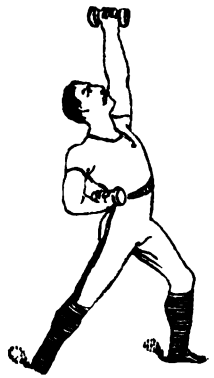


Fig. 27.

At the words "Charge, Left Side," the pupil will reverse the above position by stepping out to the Left side with the Left foot, and raising the left arm above the head, the right on the right hip, left knee bent, and right leg straight—see Fig. 27. At the word "Recover," he will as before resume the position of "attention."

MUSCLES EXERCISED—The greater part of the muscular system.

MUSICAL TIME—march. A vocal chorus should be sung here by pupils.

28th EXERCISE.

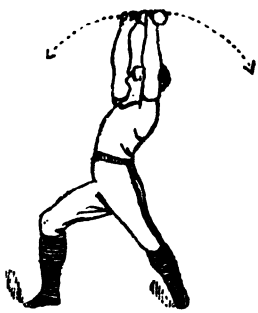


Fig. 28.

At the words "Charge, Forwards," the pupil will advance first the Right and afterwards the Left foot forwards, keeping the feet at right angles, the advanced knee only to be bent. Simultaneously he should keep the arms stiff, and raise them at the front of the body upwards until they are above the head —see Fig. 28. At the word "Recover," resume the position of "attention." At the same time open the arms outwards, sideways, and backwards, until they reach the sides. Continue these three last movements alternately 16 times.

MUSCLES EXERCISED—The greater part of the muscular system.

MUSICAL TIME—as in Figs. 26 and 27.

27th EXERCISE.

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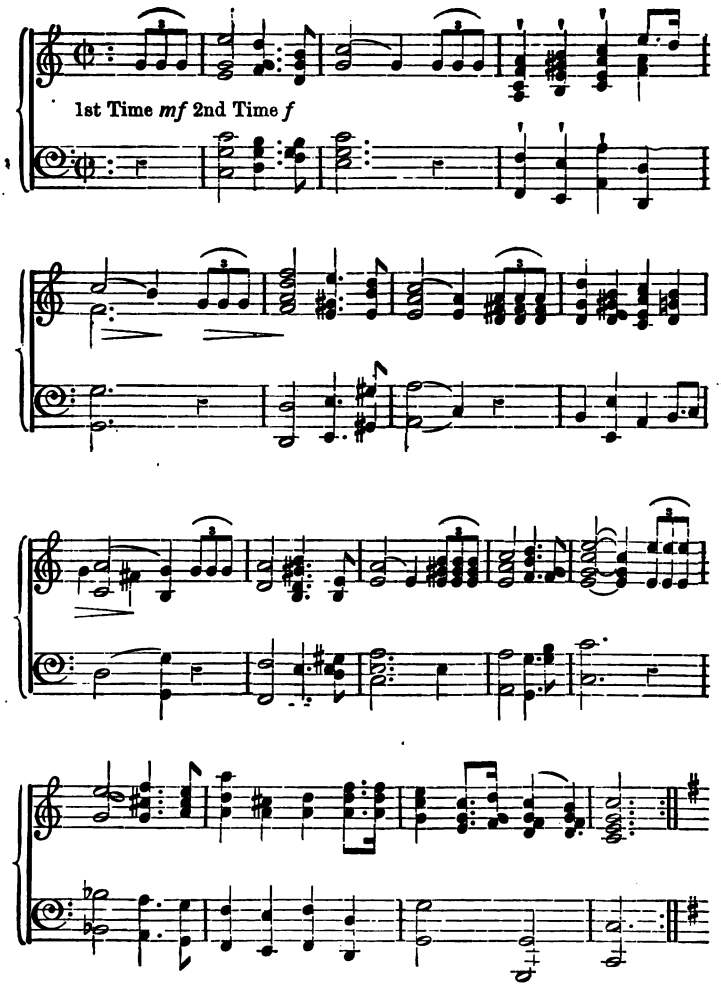
28th EXERCISE.—Same as above.

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LIGHT DUMB-BELL EXERCISES.

29th EXERCISE.

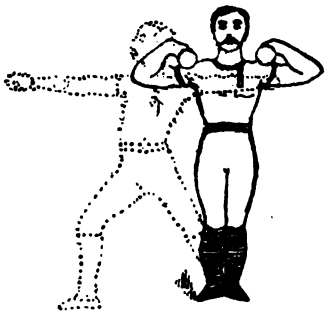


Fig. 29.

At the words "Shoulders, Charge," the pupil should step out from the position of "attention" diagonally to the right front with the right foot, at the same time extending the arms outwards and level with the shoulders—as indicated by the dotted figure in Fig. 29. The same principle of bending the advanced knee and keeping the other leg stiff should be observed here and in all similar lungeing movements. At the word "RECOVER," the bells should be brought back again to the shoulders.

MUSCLES EXERCISED—The principal muscles of arms and legs.

MUSICAL TIME—march.

30th EXERCISE.

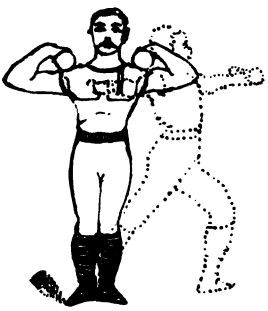
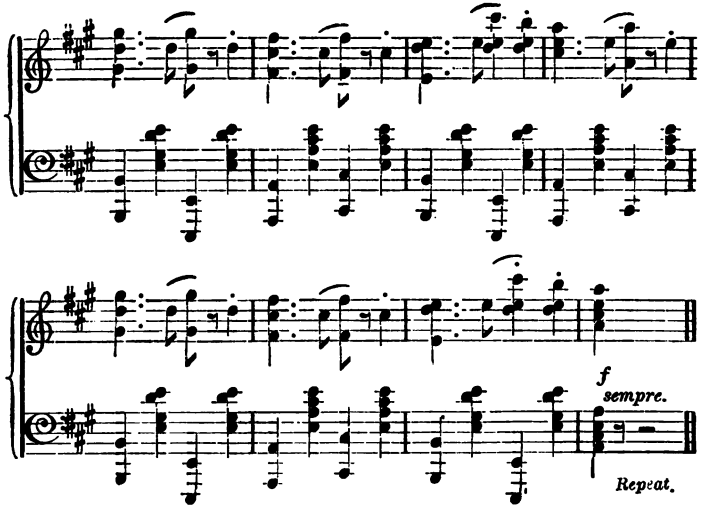
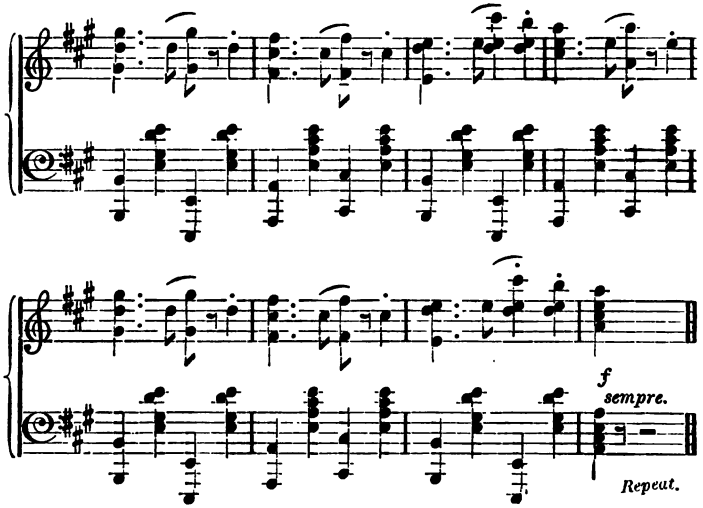


Fig. 30.

At the words "Charge, Left," the pupil should step out with the Left foot to the left rear, extending the arms as before, and as shewn in the dotted figure of Fig. 30. This exercise can be varied by stepping out into different angles, and should with the preceding movement be continued 16 times.

MUSCLES EXERCISED—as in Fig. 29.

MUSICAL TIME—march.

29th EXERCISE.

30th EXERCISE.

LIGHT DUMB-BELL EXERCISES.

31st EXERCISE.

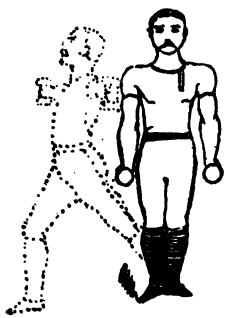


Fig. 31.

At the words "Extension, Charge Right," the pupil should, from the position of "attention," step out with the Right foot to the Right side, feet at right angles; and at the same time extend the arms outwards until they are level with the shoulders, palms of the hands to the front —see dotted figure in Fig. 31. At the word "Recover," close the heels and arms at the same time, allowing the ends of the bells to touch—see Fig. 32.

MUSCLES EXERCISED—Principally the muscles of chest and back.

MUSICAL TIME—march and vocal chorus.

32nd EXERCISE.

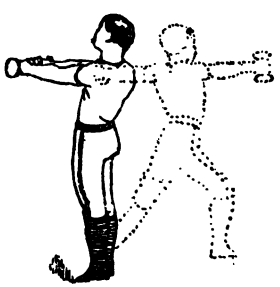


Fig. 32.

At the words "Right Turn, Charge," the pupil should revolve upon the heels, and making a Right turn, should step out again as before with the Right foot facing the rear—as shewn in the dotted figure of Fig. 32. At the word "Recover," the heels and arms should be again closed—see Fig. 32.

MUSCLES EXERCISED—same as Fig. 31.

MUSICAL TIME—march and vocal chorus.

31st EXERCISE.

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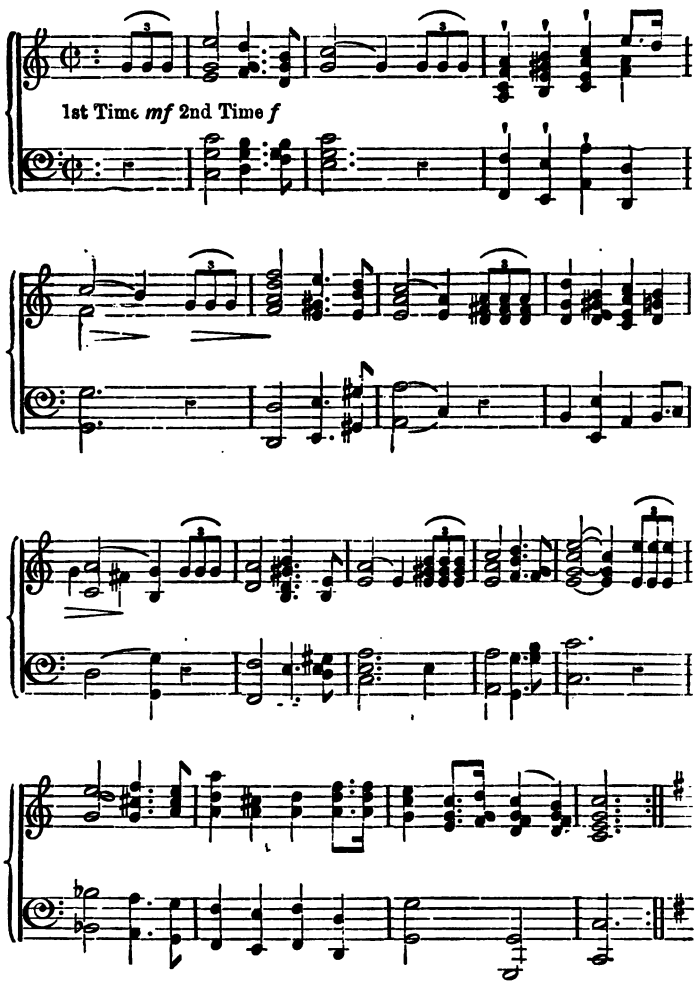
32nd EXERCISE.—Same as above.

LIGHT DUMB-BELL EXERCISES.

33rd EXERCISE.

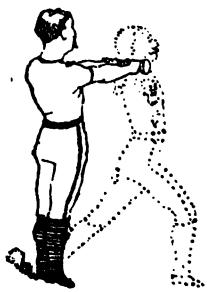

Fig. 33.

At the words "Right Turn, Charge," the pupil should again revolve upon the heels, and making a Right turn, should face the side and step out with the Right foot as before—see dotted figure in Fig. 33. At the word "Recover," the heels and arms to be again closed—see Fig. 33.

MUSCLES EXERCISED—as in Fig. 31.

MUSICAL TIME—march and vocal chorus.

34th EXERCISE.

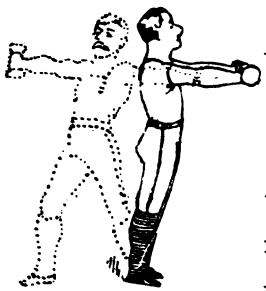

Fig. 34.

At the words "Right Turn, Charge," the pupil should again make a Right turn, facing the front or starting point of these movements, and stepping out with the Right foot—as in the dotted figure of Fig. 34—conclude these revolving movements. They should however be varied by revolving around to the Left side, stepping out with the Left foot, and continue, say, for 8 times each way.

MUSCLES EXERCISED—as in Fig. 31.

MUSICAL TIME—march and vocal chorus.

33rd EXERCISE.

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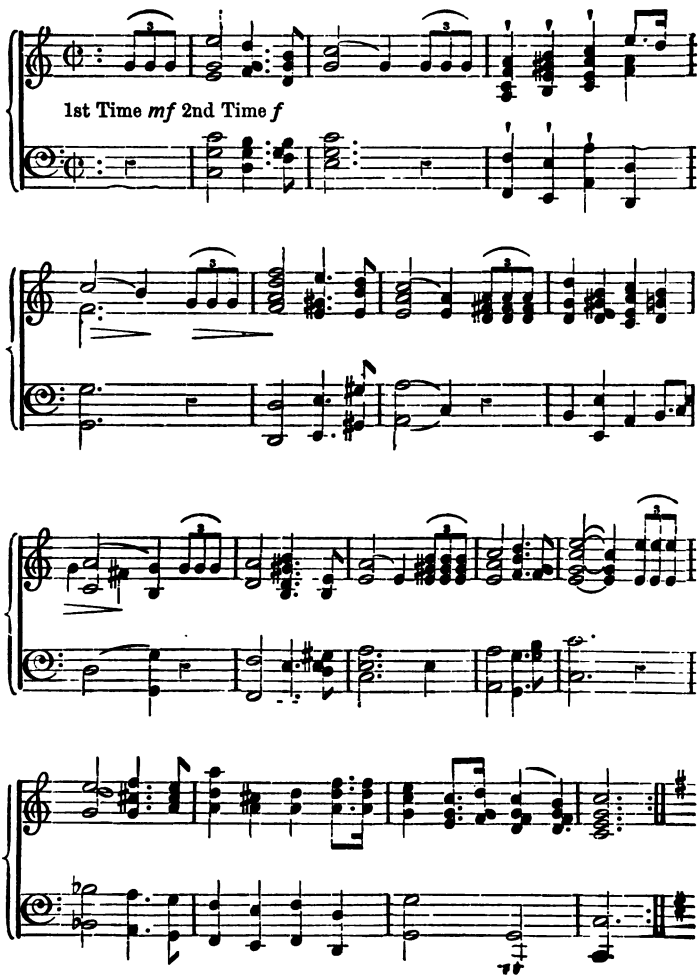
34th EXERCISE.—Same as above.

CALISTHENICS.

Calisthenics, or, as it literally signifies, "Beautiful Gymnastics," suggests no doubt, from its origin, beautiful movements by beautiful Naiads and Pompeian dancing nymphs. Alas! we fear the age of sentiment has departed, and we have degenerated into a prosaic people. Beautiful must not be mentioned in connection with athletics; let us then have "graceful movements," for nothing better pleases the eye for the beautiful. It may be urged that "moving about" in these exercises is undesirable, that it is not absolutely necessary, and tends to promote confusion. This is a paltry way of getting out of trouble. We consider that all exercises should be made to look effective, and, if possible, recreative and interesting to the pupils themselves. The following chapter describes a set of movements which, if accurately carried out, are exceedingly pretty and graceful. Light Dumb-bells, Bar-bells, or the hand alone can be used for the purpose of our example, and we will decide on the latter. We had the pleasure of preparing an "Eight" from the Liverpool Gymnasium in these movements for the National Shield Competition of 1889, and so earnestly and well did Messrs. A. E. Jones, A. E. W. Barker, Dr. H. B. Williams, P. Cookson, D. Templeton, W. H. Jackson, Dr. Gough, and P. Entwistle perform their work that they received 90, 92, and the maximum marks of 96 respectively at the various competitions, against "Eights" from London, Birmingham, Aberdeen, and Leeds. Many other figures can be arranged, but perhaps what we describe will be sufficient for our purpose here.

CALISTHENICS.

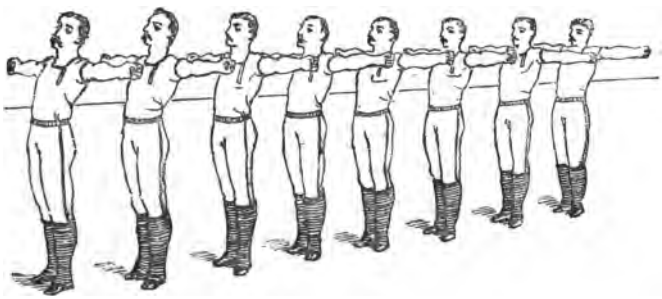

Fig. 1.

For the purpose of better describing these movements it will be best to "number off" the pupils. Consider, then, that the first figure to the left is No. 1, the second No. 2, and so on, until the last figure on the line is No. 8. The Instructor should stand at the centre of one end of the gymnasium, the pupils should march from him up the right side, and, when half way up, should "left turn" and march across the middle of the room. When Nos. 4 and 5 are opposite to him, the Instructor should give the words of command "Halt—Front." At the word "Halt" the squad should cease marching, and at the word "Front" should "left turn" and face the Instructor. It is most important that a correct bearing should here be observed by the class; let the heels, therefore, be brought together, the toes pointed outwards, and the head and shoulders be brought well back, and the body perfectly upright. Here we would suggest that the twisting movements of the arms should be performed as described in Figs. 1, 2, 3, 4, and 5 of the Light Dumb-bell exercises, the squad making a "right turn" at each change. Eight times will be sufficient for each exercise, and a galop will be found suitable music.

CALISTHENICS.

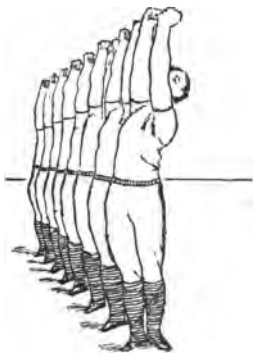

Fig. 2.

The five twisting movements of the arms will bring the squad facing "Front." At the word "Change," from the Instructor, No. 1 makes six or seven paces to the left front; No. 2 will make four or five paces and "cover off" behind No. 1; No. 3 will step behind No. 2; No. 4 behind No. 3; No. 5 behind No. 4; No. 6 will step backwards to the right rear until behind No. 5; No. 7 will step backwards until behind No. 6; No. 8 behind No. 7, until a perpendicular line is completed opposite the Instructor. These changes of position must be effected at a smart run, so that if music is being used no loss of time may occur. The squad must be careful to "cover off" immediately: this is most important, for it is the most critical figure of the whole series, and the slightest irregularity can be detected from the front, making it a risky line in a competition. However, if the squad pay attention to "covering off" both in body and movements, this risk is lessened. When the change of position is effected, we would suggest the "Bend Sideways" and "Swing ditto" movements as described in the 6th, 7th, 8th, and 9th of the Light Dumb-bell exercises, and as shewn in Fig. 2. A waltz is the most suitable music, eight bars being used for each exercise.

CALISTHENICS.

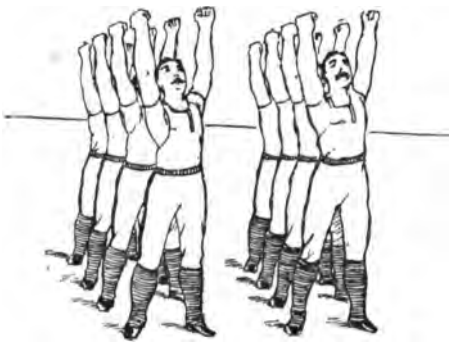

Fig. 3.

After performing the preceding exercises, and at the word "Change," the odd numbers will make two paces to the left, and the even numbers two paces obliquely to the right front, in order that they may be on a level line with the odd numbers. The effect of this will be that there will be two parallel and perpendicular lines of four men, see Fig. 3. These positions, as before, should be effected at a run, and without loss of time. The parallel lines share almost the same risk of criticism of precision that the preceding figure does; great care must therefore be taken to "cover off" immediately, not only with the body, but in the movements as well. If each individual pupil will only be careful to keep exact time with the pupil before him, this ought to be satisfactory. The front lines also should be arranged to keep time with each other, this will help to keep the essential machine-like movement so absolutely necessary. The 10th to the 16th exercises as described in the Light Dumb-bell exercises should here be gone through; it looks more effective if the lines will perform the exercises by swinging towards each other. A march is the best music, and sixteen bars may be gone through for each exercise.

CALISTHENICS.

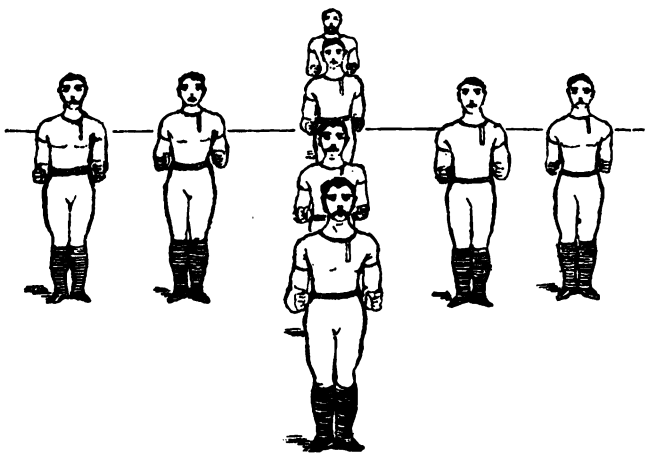

Fig. 4.

At the next "Change" Nos. 2 and 4 will remain in the same position as in last movements. No. 6 will make four or five and No. 8 seven or eight paces obliquely to the right front, thus forming their line into an angle. Nos. 1 and 3 will step back obliquely to the left rear, in order to make a horizontal line with Nos. 6 and 8. Nos. 5 and 7 will step backwards to the right rear, covering off behind Nos. 2 and 4, and the position will be formed as in Fig. 4. The Instructor must be careful to observe that both a perpendicular and a horizontal line is here formed by the squad. When in this position we would suggest that the shoulder and arm exercises, as described in Figs. 17, 18, 19, 20, 21, and 22 of the Light Dumb-bell exercises, be gone through. A galop will be found the most suitable music, and sixteen bars for the first, and eight bars each for the others, will be sufficient.

CALISTHENICS.

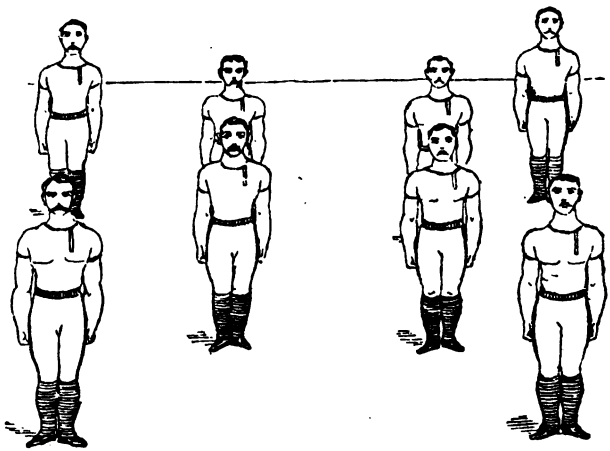

Fig. 5.

At the next "Change" No. 2 will make four or five and No. 4 two or three paces to the right; No. 6 will step backwards, "covering off" No. 4; and No. 8 will step about six paces backwards, covering off No. 2; No. 1 will make four or five, and No. 3 two or three paces to the left; No. 5 will step backwards, "covering off" No. 3; and No. 7 will step backwards, about six paces, "covering off" No. 1. This will form the positions shewn in Fig. 5, the intention being to shew or form a "St. Andrew's Cross," and before allowing the exercise to be proceeded with, the Instructor should be satisfied that the formation intended is perfectly correct, going through it slowly until properly mastered. The change must be effected simultaneously and rapidly, and without loss of musical time. The alternate and simultaneous striking movements as described in Figs. 23 and 24 of the Light Dumb-bell exercises should be gone through here, a galop being again played, and eight bars allowed for each exercise.

CALISTHENICS.

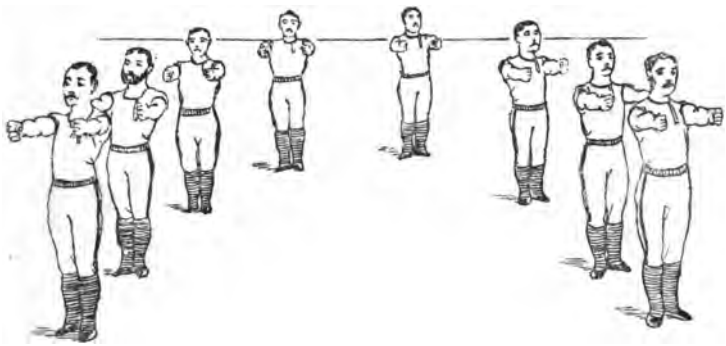

Fig. 6.

At the next "Change" No. 2 will make one and No. 4 two paces to the right; No. 6 will make a half pace in the same direction, and No. 8 will make four paces to the left; No. 1 will make one and No. 3 will make two paces to the left; No. 5 will make a half-pace to the left, and No. 7 four paces to the right. These movements must be performed simultaneously, and at a quick run, so that no loss of musical time may occur. If the above directions do not bring the pupils into a "Crescent," as shewn in Fig. 6, small alterations of pace, to suit the length of stride in the pupils, may be necessary. If the "Crescent" figure does not meet with approval, a letter **V** can be substituted by the outer ends expanding a little and the narrow end contracting; the "Crescent," however, is the best formation to precede the next movement. When the figure is formed, we suggest the exercise of raising the arms in front, and swinging from side to side, as described in Fig. 25 of the Light Dumb-bell exercises. It looks more effective if the exercise is commenced by the even and odd numbers swinging inwards, facing each other. A waltz should be played, sixteen bars being sufficient.

CALISTHENICS.

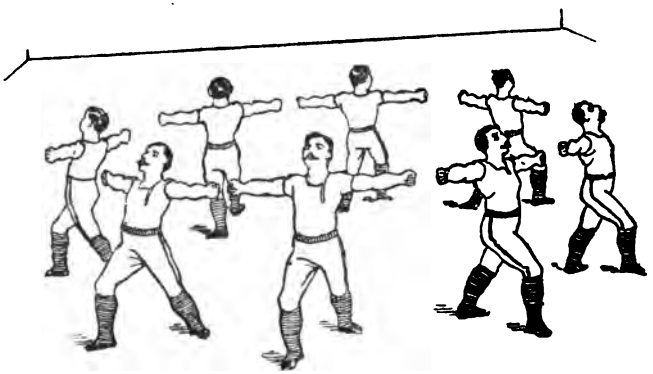

Fig. 7.

At the next "Change" No. 2 will make four, and No. 4 three paces to the left; No. 1 will make four, and No. 3 three paces to the right; the remaining pupils will "ease off" sufficiently to form a "circle" with the others. When in this position, the "charging" or lunging exercises should be performed, as in Fig. 7. Variety can be given by the pupils making a "Right about turn" and performing the "Gladiator" inwards, or each alternate pupil, say the even numbers, can make one pace forwards, and the figure of a "star" will be obtained. On marching off on the conclusion of the exercises, the position of Fig. 1 should be rapidly run into. The success of these "Figures" will entirely depend upon the precision and rapidity with which the simultaneous movements can be carried out. The Liverpool team, to which we have already referred, performed them very rapidly, without loss of musical time, the music playing continuously from commencement to finish, and without any words of command. If any difficulty is experienced in any of the formations, the Instructor should practise his squad slowly; or if he cannot get his class often enough together for this, he can practise with draughts or chessmen, numbering them by marked labels.

BALL PRACTICE.

For something new we turn to the oldest form of exercise, viz., the ball, and there is little doubt but that the sphere is the best designed shape for apparata intended to be utilized for recreation. We may assume that the absence of angles on the ball makes it a peculiarly convenient object for games. This at any rate seems to have been the opinion of the Ancients, since their games included the ball so frequently; and although we suppose we must admit that the Greek game of *Epeskiros* was our beloved football of the present day, we cannot say if the exercises we propose to treat on here have any similar origin, although the ancient game of *Aporraxis has* supplied some hints. This "Ball Practice" will doubtless be ridiculed for its simplicity. That must, however, be a recommendation to some, and although the movements here described may appear simple, *some* of them will be found difficult enough, especially as precision is principally aimed at. The exercises are very beneficial; they exercise all muscles of the body, from those of the eyes to the toes. For this reason they are especially valuable to young children and delicate people, and as an effective display they are suitable for anyone; indeed, we question if we have seen a prettier sight than a class of girls go through the ball drill, especially when they keep to elementary exercises, and thus lessen the risk of continually dropping the balls. In this case the class should not lose its formation, but have a couple of little children to pick up and return the balls to those who drop them.

BALL PRACTICE.

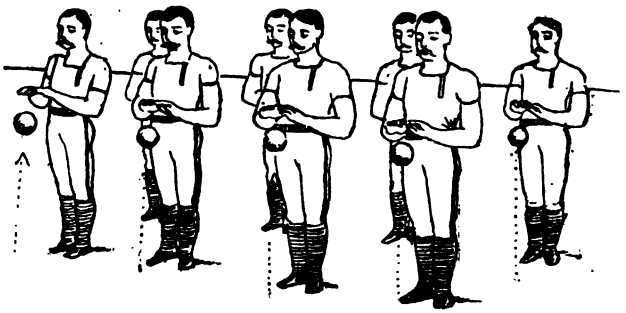

Fig. 1.

The ball practice is intended to be practised in class or squad formation. We have for obvious reasons only shewn eight figures, but the exercises can be practised simultaneously by a much larger class. All will depend upon the space and number of pupils at command. As time and precision of movement is the great object aimed at, and without which the exercises would be irregular and ineffective, each line should keep time with the line immediately before it, and the front line should have a leader, who should be placed nearest to the piano, in order to regulate the music. We cannot give space for special music to be placed here with the movements, but will in each case mention the music suitable for it. A tennis ball is the best size for children, but in the case of adults we would recommend an ordinary india-rubber ball, painted red, about 5 inches in diameter, and possessing good bouncing qualities. In practising the movements care should be taken to observe a good position of the body, which should be erect, without any swaying to and fro, which produces an appearance of irregularity in the class; use, therefore, the arms alone in the elementary exercises.

BALL PRACTICE.

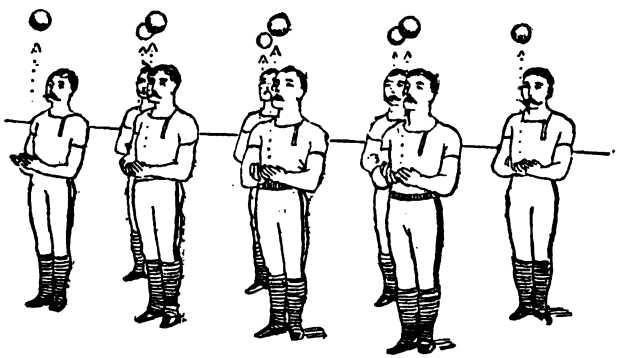

Fig. 2.

When the class is in position they should hold the "BALL IN BOTH HANDS," palms facing each other. At a given signal, and keeping time with the leader, they should throw the ball on to the ground, just before the feet, and with sufficient force to bounce the ball up again into the hands; the ball should drop into the hands slightly, and instantly inverted, to re-commence again, see Fig. 1. When this movement has been mastered properly, and in good time, it might be tried to musical accompaniment; the "Keel Row" or some slow galop would be suitable. "BOTH HANDS ABOVE THE HEAD" is the next movement, and in this the palms of the hands should be raised upwards, and the ball thrown upwards, past the face and just above the head, see Fig. 2, the eyes following the ball as it goes upwards. The body should be perfectly erect, with the heels together and toes pointing outwards. A waltz will be found suitable music, and about sixteen bars each would be ample for this and the preceding movement. Accuracy of pitch must be studied, the throw being neither too long or too short, but guided by the musical time, and the responsibility of this will rest with the front line, who should in turn be guided by the teacher.

BALL PRACTICE.

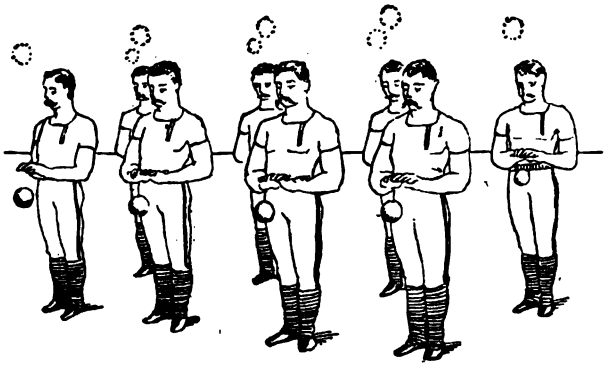

Fig. 3.

"BOTH HANDS UP AND DOWN" is a combination of the two preceding movements, and should not be attempted until they are thoroughly mastered separately. When this is done, COMMENCE by throwing the ball on to the floor, as in Fig. 3, and on catching it with inverted hands, throw it above the head, as shewn by the dotted lines in Fig. 3. On catching it again, repeat the movements alternately. A waltz may be played for this combined movement, but it will be necessary, in order to keep time, that the ball should be thrown with greater force upon the ground, so that it may rise a little higher above the hands before being caught. This will fill out the necessary time. Variety may be given to the practice by the class making a "Right turn" between each movement or each combined movement for the first eight bars of the waltz, reversing to "Left turn" for the second eight bars. In turning revolve upon the heels, and be careful not to get away from the position on the floor, or else when you have turned around you will find it will interfere with the ground space for the next exercise. Endeavour also to keep the elbows pressed against the sides, using the wrists and forearms principally.

BALL PRACTICE.

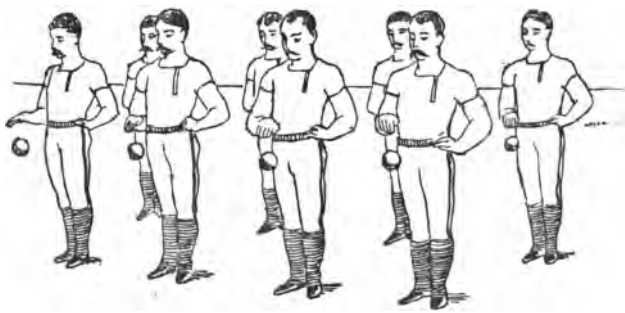

Fig. 4.

"RIGHT HAND DOWN" is a little more difficult than the movements already described. STAND with body erect, left hand being placed upon the left hip. Start with the ball in the right hand, palm upwards, elbow to the side. Now twist the hand downwards, strike the floor at the outside of the right foot with the ball, and as it rebounds above the hand, turn the hands upwards and catch it, after which twist the hands downwards and repeat. After eight or sixteen bars of a waltz has been kept time with, change to the "LEFT HAND DOWN" by placing the ball into the left hand, the right hand on the hip, and repeating the practice with the left hand for a similar time. Vary by "KNOCKING THE BALL" down without catching it on the return, but instead knock it back again with the palm of the hand, see Fig. 4, change to left hand and repeat. The ball is in danger of getting away in this movement; endeavour, therefore, to be accurate in striking the ball to the direction in which it should go; a little to the outside of the feet will be found best. A galop would be the most suitable music for these movements.

BALL PRACTICE.

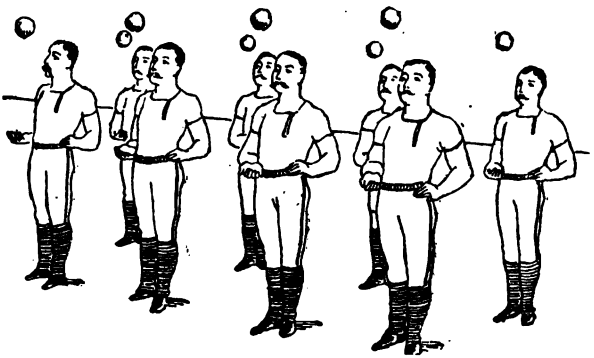

Fig. 5.

"RIGHT HAND UP" is a pretty movement if good time is kept, and if care is taken to throw up the balls to an equal height. STAND with body erect, left hand upon the hip and the ball in the right hand, keeping the right elbow close to the side. Now throw up the ball just over the head, looking up as you do so, see Fig. 5. It would be well in this movement if you could contrive to give the ball a circular motion, *i.e.*, throw it towards the left side, and allow it to drop to the right side. This is good practice for a future movement. After having performed this about sixteen times, change to the "LEFT HAND UP," place the ball in the left hand, right hand on the hip, and repeat the exercise with the left hand for a similar number of times. The exercise can be varied by using each hand alternately, or by "THROWING THE BALL FROM HAND TO HAND, *i.e.*, from the right over the head, describing an arch, and descending into the left hand, and *vice versa*. This is a very graceful exercise if done properly, and if performed with a "bend sideways" movement, bending sideways from the waist as the ball descends into the hand, looks very well indeed. Musical time—waltz.

BALL PRACTICE.

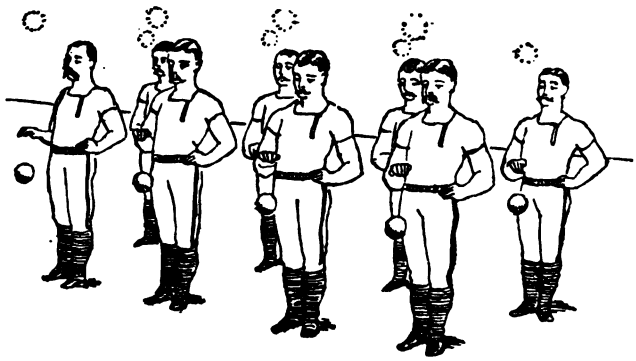

Fig. 6.

"RIGHT HAND UP AND DOWN" is a combination of the two preceding exercises. STAND erect with left hand on the hip, with ball in the right hand, palm upwards. Commence by throwing the ball above the head, as in Fig. 5. On catching it again, twist the hands downwards and strike the floor with it to the right side, as in Fig. 4. On catching the ball again, repeat the movements of Fig. 4 and 5 alternately sixteen times. At the word change, pass the ball into the left hand, and perform the same exercise a smilar number of times with the "LEFT HAND UP AND DOWN." Vary these movements by passing the ball from the right to the left, and *vice versa*, as before described; and also strike the ball with the right hand on the ground at the front of the feet in an oblique direction, catching it with the left hand, reversing it alternately from left to right. When continued practice has enabled the class to perform these and the preceding movements with tolerable accuracy, a pleasant variety may be given by marching as the exercises are being performed—the direction and distance to be determined upon beforehand. Sixteen bars of a galop for each of these movements would be suitable.

BALL PRACTICE.

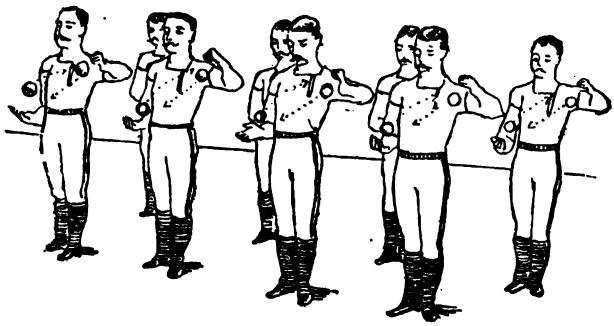

Fig. 7.

"BOTH HANDS WITH TWO BALLS" is a good advance upon the previous exercises described, and a very interesting exercise it is, requiring a little ambidexterity, no doubt; but if you keep cool, and do not get flurried, you will not be very long in learning it. This extra ball should either be handed round to the class, or each member should keep it in his pocket or sash, if convenient. COMMENCE by practising with one ball in the following manner: take the ball in the right hand, keeping the right elbow by the side, hand opposite the waist; raise the left hand opposite the shoulder; now throw the ball up to the left hand and return it to the right a few inches under the direction it has come in, thus describing an oval course for the ball to take from hand to hand. Practise this slowly at first, until you get the hands accustomed to the amount of throw required, then increase the speed when you can do this, and it will not be very difficult to do it with both balls, as in Fig. 7. First practice no doubt will result in dropping the ball frequently; for this reason, perhaps, it would be well to practise it individually first, and this can be done at home conveniently, as it does not take up much room. A galop will be found appropriate music for this exercise.

BALL PRACTICE.

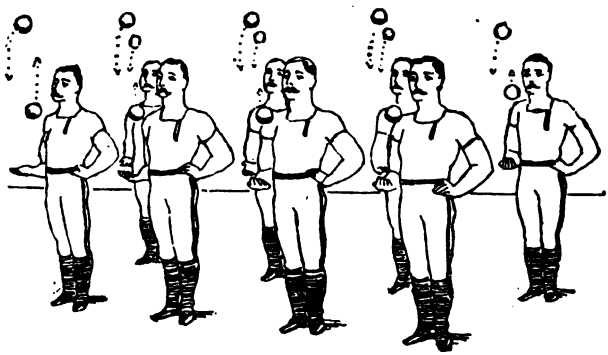

Fig. 8.

"RIGHT HAND WITH BOTH BALLS" will not be found very difficult, especially if you have practised the movement suggested in Fig. 5. HOLD both balls in the right hand, left hand being placed upon the hip; throw one ball upwards, *past the face* to above the head, so that it may *descend* to the *right side* of the head. As it is about to descend, send up the second ball in a similar manner, and prepare the hand to receive No. 1 ball, which by that time will have descended. The principal cause of failure in this exercise is an inclination to throw up the second ball too soon, and thus invariably colliding it against the first ball; the second ball should not be thrown until the first is *almost in the hand*, and do not allow the elbow to go too far from the side. Continue this exercise sixteen times. If the ball should fall in the class, the pupil should remain in his place until an assistant can throw him another ball. This exercise can also be performed with the left hand, but it is of course more difficult; it can also be performed with both hands, *i.e.*, two balls in each hand. Pretty varieties in crossing the balls can also be done, but this requires great practice. A galop will again be found suitable for this movement.

BALL PRACTICE.

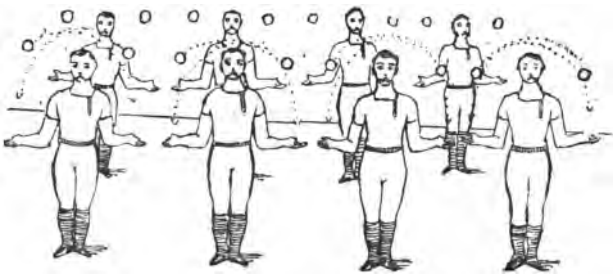

Fig. 9.

"BOTH BALLS FROM HAND TO HAND" is a very effective looking exercise in a class, and not so difficult as it seems to be. COMMENCE by practising with one ball, let the arms hang down by the sides, and raise up the forearms outwards until they form an angle, see Fig. 9. Throw the ball up from the right side, making it describe an arch just over the head, descending by the left side into the left hand, as previously described; now reverse the movement, throwing it back again with the left hand, as previously described. This will take some practice before the necessary accuracy of pitch is obtained; some people acquire it very quickly. When you can manage the throw fairly well with both hands, you can try it simultaneously with both hands and both balls; the right ball should be thrown a little higher with the right hand, so that it will not collide with the left on passing. Private practice is necessary with this exercise and some of the other more intricate movements before they should be attempted in the class, for, as can be imagined, a collision with one would probably mean a collision with another, ending with the class formation being broken up. But, as we have pointed out, it is a simple matter to practise these movements individually at home until the necessary accuracy is obtained. A waltz is perhaps the most suitable music for this exercise, and if the balls are dropped they should be returned as usual by an assistant.

BALL PRACTICE.

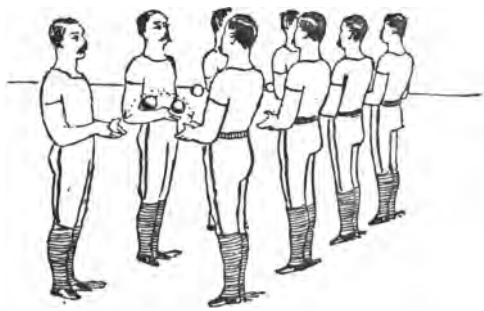

Fig. 10.

There are many other exercises in ball practice which look well and are very clever; but we doubt if a class could be got together who could spare the time to devote sufficient practice for these more difficult exercises. We will, however, describe one as an example, viz., "THE SHOULDER THROW." This consists in throwing the balls behind the back and causing them to drop over the shoulders into the hands again. Commence by practising with one hand, and endeavour to throw the ball with the right hand under the right armpit. The wrist should strike the armpit as nearly as possible, the sudden stop of the throwing arm will cause the ball to pitch over the right shoulder to the front, when it is caught by the right hand again, see Fig. 10. Practice alternately with each hand, and when you can do this you might practice the "SIMULTANEOUS THROW;" this is done by throwing both balls over both shoulders at once, and is not very difficult if you can manage it alternately. Suitable music—a waltz.

BALL PRACTICE.

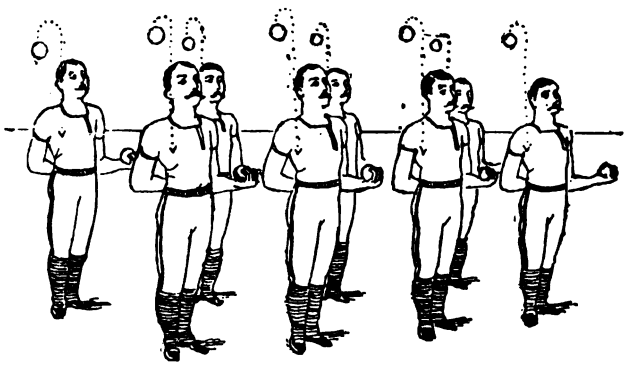

Fig. 11.

"DOUBLE BALL PRACTICE" consists of the lines in the class facing each other, and performing the exercises which we have described for individual practice in combination with each other. As an example, say No. 1 line will simply throw the ball with both hands into the hands of No. 2 line, No. 2 line returning it in the same way. Again, two balls may be thrown from one to the other simultaneously, one passing over the other; the two balls from each pupil may also be thrown in this way. Bouncing the ball on the floor can be utilised, each line striking the floor simultaneously and catching the opposite balls; or throwing the balls over the shoulder to the opposite line, and *vice versa*, can be done with a little practice. These will serve as illustrations, and then what variety and to what degree the exercises can be developed must depend upon the precision that the class can perform the movements together, and with the music.

FIGURE MARCHING AND RUNNING.

Figure marching is intended not only as a lesson in deportment, but as a disciplinary measure for bracing one up; forsaking for the while the contracted shoulders and slouching gait that you may possibly have, as, under the inspiration of some popular music, or better still, some stirring vocal chorus, you tread with firm step along with your companion in this healthful work. Then, in a glow with your unfatiguing and joyous march or run, you get ready for your douche or sponge; then it is that you appreciate the value of exercise as a means of health. And this, like most other really good gifts, is within the reach of all at little or no cost. The figures here described are but a few of the many that will suggest themselves to the ingenious Leaders. The constant *turning* and *twisting* will develop all parts of the feet alike, and at the same time keep away any headache that would probably occur if the run was in a continuous circle. Then the social and elementary character of the exercise all tend to make it a popular "finish" up after an evening's work. What should most be aimed at in this form of exercise is to improve the wind, and to gradually induce perspiration in order to prepare for the bath; this is, in our opinion, best done by a run of this kind to musical accompaniment. The pleasure of the run is often spoiled by contracted running or taking short steps, for although this enables more intricate figures to be performed, it is at the expense of much enjoyment, and is certainly not so healthy or useful as the run proper.

FIGURE MARCHING.

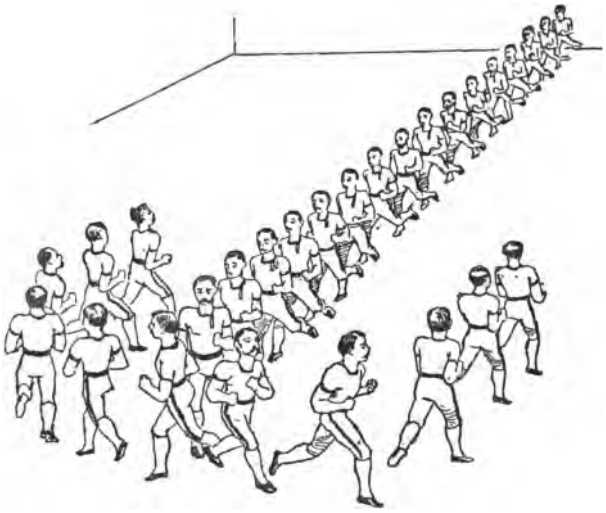

Fig. 1.

These movements should first be learnt in marching order, in order to acquire the various turns and evolutions that the Leaders may put you through. The INSTRUCTOR should stand at the front of his class, in order to see that everyone makes the correct turn, keeps step, and marks time when required, and generally to superintend the movements. The class should form into "ONE LINE," according to size if possible, for it spoils the effect to see tall Mr. McTomkyns next to short Mr. Baggs. The class will march up one side of the room, say the left side, for the sake of explanation, and on reaching the top make a right turn until the centre of the bottom of the room is reached, when another right turn should be made, the class coming down the centre of the room in single file. When this end, near to Instructor, is reached, No. 1 will turn to the right, No. 2 to the left, and so on alternately, the odd numbers to the right and even to the left, thus forming two independent lines, see Fig. 1.

FIGURE MARCHING.

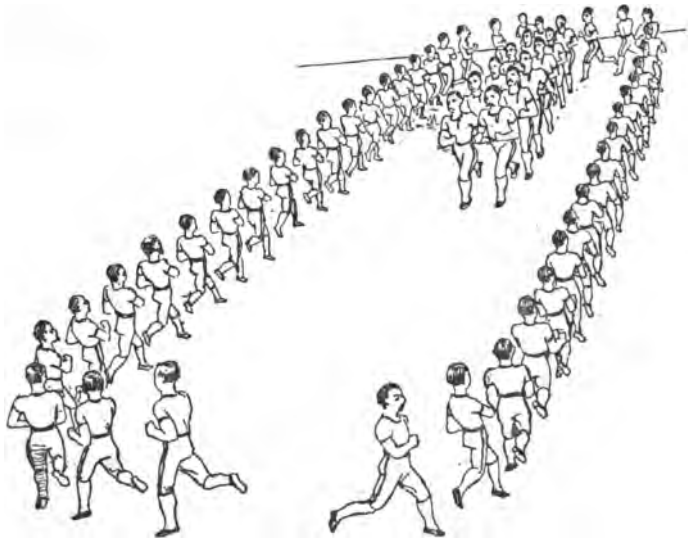

Fig. 2

The "TWO LINES" thus formed should run up each side of the room until the top is reached, when each line should make for the centre of the bottom of the room, and join together in couples; *i.e.*, Nos. 1 and 2 will form the first couple, Nos. 3 and 4 the second, and so on, see Fig. 2, until the whole class is formed into two lines. When formed in this way the Instructor should see that the couples "form" close together, and that they "cover off," *i.e.*, keep immediately behind each other, so that the Instructor can see no deviation in the double line. The class should be very careful to keep step, and should the class be too large for the room, making it awkward to separate in twos, by reason of the single line not being disposed of in right and left lines, the Instructor should order the class to "mark time" until there is no obstruction.

FIGURE MARCHING.

Fig. 3.

When the front of the room is reached by the Leaders, the first couple should, as in the last movement, turn to their right, the second to their left, third to their right, fourth to their left, and so on alternately; each double line thus formed marching or running around the room until the top end is reached, when they turn inwards, running to the centre of the top end. The couples here join, and linking arms, come down the centre of the room "BY FOURS," see Fig. 3. The Instructor will again see that the centre of the floor is exactly divided by the two inside men, that the lines are perfectly straight and parallel with each other, and that all are keeping perfect step. When they reach the front of the room, a good effect is caused by the Instructor causing them to "mark time;" then make a right about turn march, on which the class will retreat to the end of the room. The same order repeated will bring the class back to the front, or various formations can be gone through before the next figure is attempted; the formation of "Fours" must, however, be resumed at the finish.

FIGURE MARCHING.

Fig. 4.

"BY EIGHTS" is a greater test of precision and discipline than the other figures. When the class, by fours, reaches the front of the room, the first four will right wheel, the second four left wheel, the third four right wheel, the fourth four left wheel, and so on alternately, the various fours proceeding around the room until the top end is reached, when they each repeat the right and left wheel again until it brings them into the centre of the top end of the room, where they join together and come down the centre of the floor by eights, see Fig. 4. The Instructor will see that, in addition to the usual precision, the fours execute the right and left wheels correctly. If the class do not understand the principle of it, it is best to put the two first fours through, the remainder looking on. In "wheeling," the inside man should turn, marking time, the next should step, the third a little quicker, and the fourth quicker still, taking care to preserve a perfect straight line when turning. When the class is in the formation of "Eights" they should mark time, then right about turn, and march to the rear; mark time again, then another right about turn, marching again to the front. During these movements a vocal chorus would be effective and appropriate, marking time until the chorus is concluded.

FIGURE MARCHING

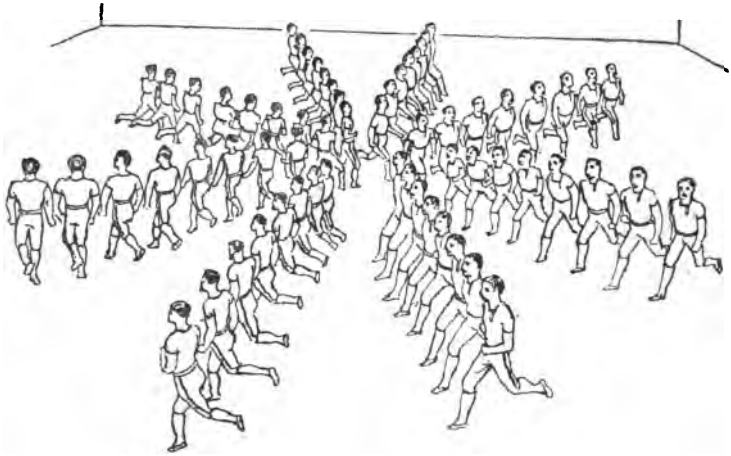

Fig. 5.

The "STAR," if properly executed, is one of the prettiest figures in the series. When the class is in eights they should, by the Instructor's words of command, "LEFT TURN, MARCH," be brought closer to one side of the room, so that the end man at the right end of their lines should be in the centre of the floor. When here, they should be "fronted," facing the front, and the order given to "RIGHT WHEEL," when the inside two of each line will turn in marking time order, the next two will turn with a short step, the next two at a fair run, and the outside two at a quick pace; each line to be perfectly straight and unbroken, see Fig. 5. When the "Star" is thus formed the Instructor should give the order to "MARK TIME; INSIDE FOURS—RIGHT ABOUT TURN; CLASS—QUICK MARCH—DOUBLE;" the effect of these orders being that the inside fours will march or run to the left in a small star, and the outside fours will make a large circle. This can be varied by the words of command being reversed. In learning this latter movement it is best to attempt it in marching order, a little patience being necessarily required.

FIGURE MARCHING.

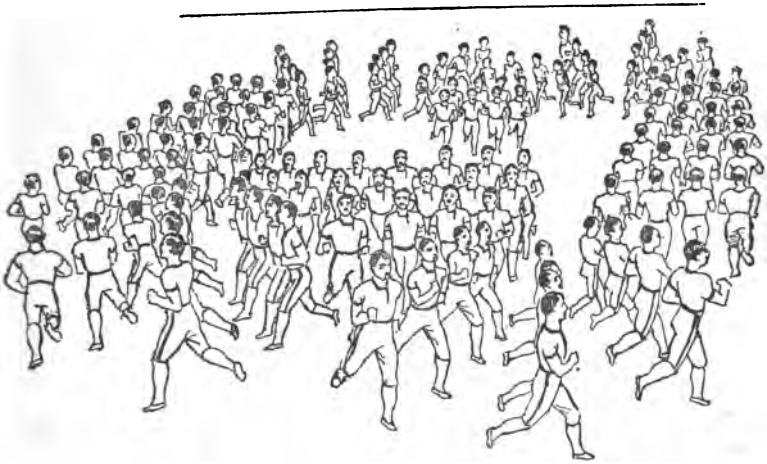

Fig. 6.

To get "BACK INTO FOURS" seems a little perplexing at first sight, but if the class is obedient, and the Instructor strict and up to his work, it is not very difficult. The class, then, should mark time until they are again to their left side of the room, when they should "RIGHT TURN" and MARCH until they are in the centre of the room again; here they should "FRONT," facing the front of the room in "Eights." At the word "MARCH" they should advance to the front; and at the words of command "RIGHT and LEFT WHEEL," divide up the centre, one side of the fours turning to the right, and the remaining fours turning to the left, each four preserving as before an unbroken and straight line, see Fig. 6. The Instructor will remain, as before, at the front of the room, to see that his orders are carried out properly, and that perfect time and step is kept. In marching off the right-hand section should make the pace a little quicker than the left section, in order that they may arrive at the top end of the room first.

FIGURE MARCHING.

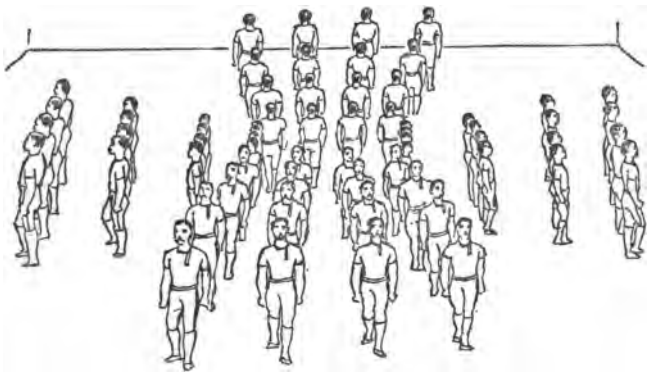

Fig. 7.

When the "fours" reach the centre of the top end of the room, the first four will go on a little ahead of the second, who will fall in behind them, the third four will fall in behind the second, and so on alternately until the class comes down the centre of the room by fours. When in this position they should mark time while they attempt the "MALTESE CROSS." In this, assuming you have sixteen lines of fours, the first four lines mark time at the front of the room, the second four lines make a "RIGHT WHEEL, MARCH," forming the right angle of the cross; the last line "covering off" with the right row of the first four; the third set of four lines will "LEFT WHEEL, MARCH," until they form the left angle of the cross; the last four lines will make a right about turn, facing the end of the room. At the words "OPEN ORDER" the outside lines will open order to give shape to the figures. The class will now mark time, see Fig. 7. The "Star" and several other figures may be obtained from this central position on the floor, changing from one to the other under the direction of the Instructor. If there should not be the exact number of sixteen lines for the last figure, the numbers of lines should be equally divided, which will answer the same purpose.

FIGURE MARCHING.

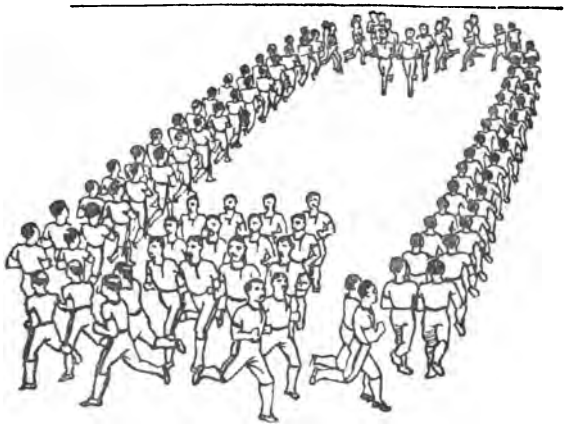

Fig. 8.

After performing the figures appropriate to the formation of fours, the class should rapidly "RE-FORM INTO TWOS." The best way to do this from the figure of the "Maltese Cross" is for the lines to "close order," *i.e.*, to get into close marching order. The rear lines, who have been facing the end of the room, will RIGHT ABOUT TURN, and march up the rear of the front lines; the lines forming the right angle of the cross will "RIGHT WHEEL, MARCH," falling in behind the fours who have just marched up; the lines who have been forming the left angle of the cross will simultaneously make a left wheel march, and fall in behind; the class will thus be in lines of fours again. At the words "RE-FORM INTO TWOS" the class will divide down the centre into lines of twos, one side marching or running around the room to the right, and the other side the same to the left side. Arriving at the top end of the room the first two of one side will come down the centre, the first two of the other side falling in behind them, and so on alternately until the class is in two lines; see Fig. 8.

FIGURE MARCHING.

Fig. 9.

While the class are in double file, various figures can be performed, the principal, however, of which is the Fig. 8. To perform this, the class will march around the room and "OPEN ORDER," *i.e.*, the couples will separate sufficiently to allow a line to intersect them. The class will then come from the top of the room down their right side, pass the front, turn to their left, and make, in a diagonal direction, for the top corner of the room on the opposite side. They will then turn to their right, passing the top of the room; when at the corner, they will turn to their right, run in a diagonal line to the opposite corner at the front, passing through or intersecting the centre of the line *en route*, continuing to do so by every alternate couple; see Fig. 9. The Instructor will see that the Leaders who are in charge of the lines are well up in the figures, as much depends upon them in making it the necessary accurate shape. If there should be any difficulty in making this figure, it should first be attempted in one line, the other line meanwhile looking on, by which they will soon be able to see the faults if they exist. Portable marks may also be placed at different angles to shew where the various turns should take place.

FIGURE MARCHING.

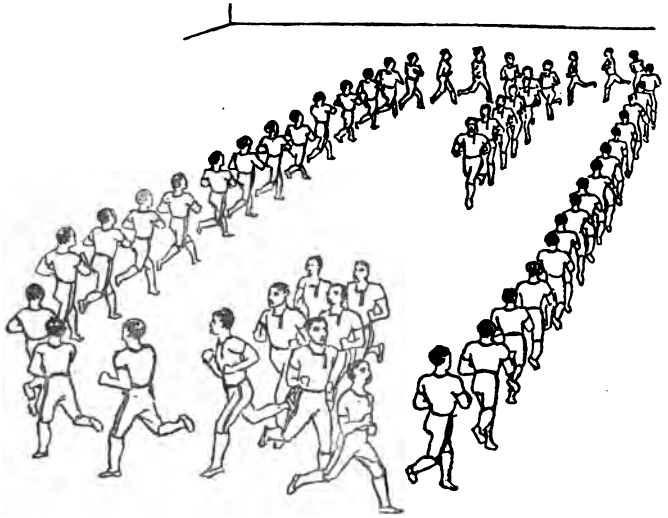

Fig. 10.

To "RE-FORM INTO SINGLE FILE" the class will march down the centre, and on reaching the front of the room, divide into two lines, one line turning to the right, and the other to the left, running around the sides of the room until the top is reached, when they will RIGHT and LEFT turn until the centre of the top of the room is reached. Here they will come down in single file, falling in behind each other alternately, *i.e.*, No. 1 of one line will lead, No. 1 of the other line falling in behind him, and so on until the class is in single file again; see Fig. 10. Plenty of variety in Figure Marching can be obtained when in single file, such as Horizontal, Parallel, and Perpendicular lines, winding into and forming large circles, and many other figures that will no doubt suggest themselves to the Instructor, who should communicate his wishes to the Leader of the lines. This should be done previously to the class exercising; in fact, all arrangement of figures should be made collectively by the Instructor and Leaders, using a pencil and chart for the purpose.

FIGURE MARCHING.

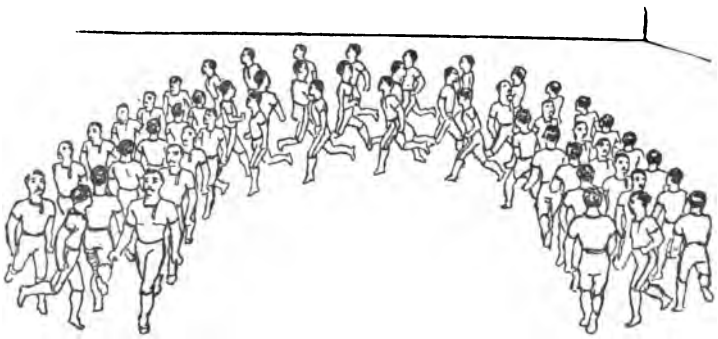

Fig. 11.

Amongst others, "THE CRESCENT" is a very effective looking figure. Starting from one corner at the front of the room the Leader leads the class upwards, across the centre of the room, and down to the other corner of the front of the room, thus forming a crescent-shaped figure. The Leader will continue to make parallel lines in the crescent, see Fig. 11; and when this is finished he can form another crescent at the other end of the room. Or he can commence from the right-hand corner of the front of the room, form a single line crescent to the left-hand corner of the front, then form another single line along crescent to the side of the room, another at the top end, and finally another at the remaining side of the room, thus forming alternately four crescents. If your line is long enough to shew these crescents simultaneously, a very good effect is shewn.

FIGURE MARCHING.

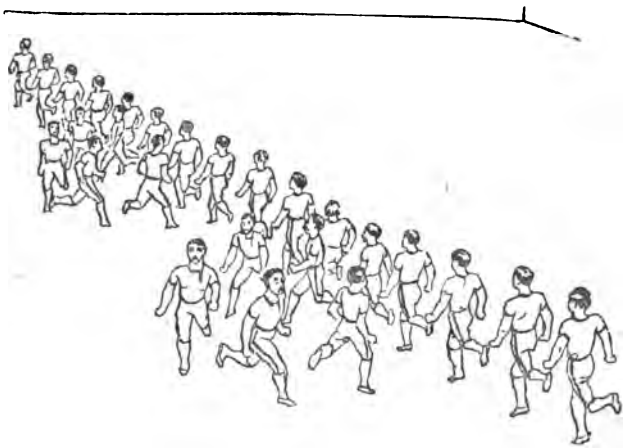

Fig. 12.

"THE SCROLL" is rather difficult, but it looks so effective that we recommend a little perseverance until it is properly learnt. THE Leader should take his class around the room, and when going up the right-hand side he should describe, with about seven or eight of the pupils immediately following him, a short circle to the left, dropping into the line again behind, say, No. 9; No. 2 should fall in behind No. 10; No. 3 behind No. 11; No. 4 behind No. 12, and so on alternately until the Leader is at the head of his line again. None of the class must follow the pupil who has thus temporarily come between himself and the man preceding him, but must keep the usual line; and when it comes to their turn to do the scroll they must remember they are only intersecting the main line for a short time while the scroll is being formed. The Leader should form a scroll at each corner of the room.

PARALLEL BARS.

In commencing our remarks upon apparatus work, or gymnastics proper, we are assuming that our readers are fairly proficient gymnasts, and have mastered the exercises mentioned in Part I.—the elementary volume of this work. It will be necessary for them to have had some previous experience in the "Parallels" before attempting what is here described. Advanced gymnasts will understand that in giving instructions for advanced work, the *physique* of the pupil should be considered, and that some "Feats" are not possible to certain physiques; but what is denied to one is granted to another, and *vice versa*, so that it is possible for all to distinguish themselves in "something." We do not advise cultivating the "Parallel Bars" at the expense of neglecting other apparatus; if this is done, abnormal development of particular parts, the *scapular* muscles principally, will result, giving the pupil a hunchbacked appearance. It is not wise either to practise too long at one piece of apparatus; frequent change should be made. In passing, and to prevent any misconception that our teaching is *all* theory, perhaps we may mention that every feat mentioned in this and succeeding chapters of this book has been performed by the author, or by his brothers Edward and the late Willie Alexander, and no doubt, by many other gymnasts in this country. We would advise gymnasts in all cases where risk is incurred to obtain efficient assistance. *There are* individuals who discard all help in this way, either from a spirit of bravado or with an idea of hasty proficiency; but from whatever motive, they are seldom successful; for, admitting one or two fortunate successes in this way, the inevitable collapse will come, and retard progress. An assistant or two, with a rope or lungers around the waist, will prevent this, and lead to a more rapid state of efficiency and knowledge of your work.

PARALLEL BARS.

Fig. 1.

"JUMP THROUGH THE HANDS."—This is not a *very* advanced exercise, but before attempting it here, we must be able to perform it safely upon the Horizontal Bar at a height of about 4 feet. STAND opposite the outside of the "Parallels," with the hands resting on the nearest bar. The hands should be opposite the shoulders in width, and the thumbs underneath—see Fig. 1. Commence by endeavouring to place the feet upon the bar without removing the hands, then through the hands sitting upon the bar, and afterwards over the second bar, sitting upon it, and finally clearing it—see Fig. 2. Be careful you do not knock your hands or scrape your shoulder-blades in clearing the second bar, and have a mattress underneath, for we have seen a "hesitating" pupil catch his toes on the first bar, doing a header on to the second. Another exercise is to "JUMP THROUGH THE HANDS OVER THE BARS ALTERNATELY," dropping on to the feet in the centre between the bars. You loose hold of the first bar, and immediately catching the second, jump through the hands in a similar way. On dropping on to the ground over the second bar, immediately turn around, facing the bars, and repeat the movement. The "PIROUETTE AND JUMP" is another variety of the jump through the hands. This is performed by standing at the front of the first bar—as in Fig. 1—then making a slight spring from the ground, make a complete turn around before you catch the bar and jump through the hands, making this turn before each jump.

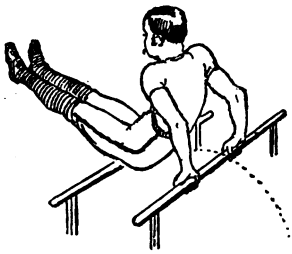

Fig. 2.

PARALLEL BARS.

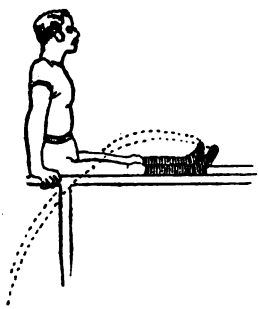

Fig. 3.

The "CUT ON AND OFF" in a swing is a pretty feat, and should be attempted when the pupil is not too tired, for it requires some agility, quickness of eye, and strength in the abdominal muscles. COMMENCE by grasping the ends of the bars with the hands, and content yourself at first with simply throwing the legs on to the bars, "frog-leap" fashion, catching the ends of the bars behind you simultaneously. After a little practice, keep the legs stiff from the waist and close the heels sharply, and you will find that you will clear the bars, as in Fig. 3. To "CUT OFF" is not very difficult, but it must be practised with care; and visions of a collapse on the back "long ago" make us recommend a mattress and some helping hand behind you when attempting it. Keep the legs stiff, and lean slightly back; this will enable you to clear the bars, as in Fig. 4. We never saw this and other leg-work performed better than by F. Klein and other members of the German Gymnastic Society, who seem to have a special faculty of placing their legs with great rapidity wherever they please; and anyone wishing to see leg movements performed on the Parallel Bars with rapidity and precision cannot do better than attend the German Gymnasium at King's Cross. These leg movements should always be performed with the knees perfectly stiff, and, if possible, with the toes pointed. In fact, all exercises that are worth anything should be performed in this manner; nothing looks more slovenly than to see anyone work the Parallels with bent knees.

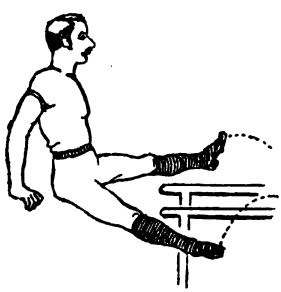

Fig. 4.

PARALLEL BARS.

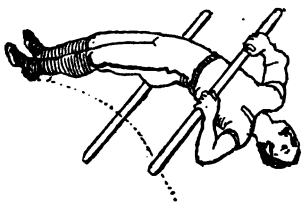

Fig. 5.

The "SHOOTING PLYMOUTH" is always a neat looking feat, either on the Horizontal or Parallel Bars. We call it by the above name because about 1863 we saw it performed very neatly by a gymnast named George Cleverly, who afterwards became an *artiste* at Hengler's Circus under the name of "Clevori," and who named this particular feat after his native town. It is now frequently executed by any advanced gymnast, and we have seen Mr. George Craig, of the Bournemouth and Leicester Gymnasiums, do it from the hands-balance on the first bar. COMMENCE by practising it on a low Horizontal Bar, getting someone to hold a cord or lath in the place of the second bar; stand as in Fig. 1 when commencing, and endeavour to shoot over the cord in "hollow-back" fashion, as in Fig. 5. When you can do this safely, without touching your back or shoulders,

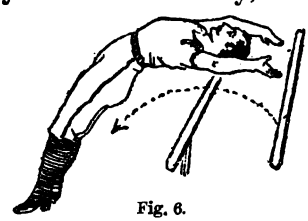

Fig. 6.

you might attempt it over the "Parallels," as in Fig. 6, having an assistant outside the second bar ready to prevent your back or shoulders touching if necessary, and mind your nose in going over the first bar. Another way to vary this feat is to commence from BREASTING THE FIRST BAR AND SHOOTING OVER THE SECOND. This is a good finish to any of the simple vaults, the forward one especially. Another variety is to perform the feat of jumping through the hands first, see Fig. 2; then turning round, perform the Shooting Plymouth. It can also be performed in pairs, the gymnasts facing each other and going over the opposite bars; but the "SHOOTING PLYMOUTH FROM THE HANDS-BALANCE" is by far the most effective way of shewing it. To do this you COMMENCE from the hands-balance in the centre of the bars, afterwards walking backwards on to one bar.

PARALLEL BARS.

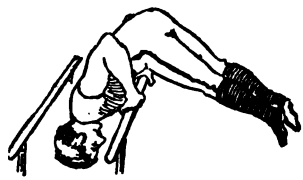

Fig. 7.

The "HAND-SPRING OVER THE PARALLELS" is very similar to the Hands-spring from a low Horizontal Bar, but the thought of alighting on the second bar is not a pleasant one, and makes one go at it with some caution, which is quite necessary, for we have seen pupils drop upon the bar in this undesirable fashion. COMMENCE, therefore, by practising over a cord, to represent the second bar, as in the last exercise; the head should be well down between the bars, the arms bent, the ordinary grasp of the hands, the legs perfectly stiff from the waist, as in Fig. 7. When the body is a little more perpendicular, suddenly reverse the position of the body, by bending the body from the waist backwards, allowing the legs, which are to be kept stiff, to fall over the second bar. Have an assistant ready to prevent your back from colliding. This feat can also be performed in the *centre* of the bars, when the same directions will suit, a hand, of course, being on each bar; or it can be done in "hollow-back," forward roll style. We have seen Mr. P. North, of Bradford, and Mr. G. Renshaw, of Manchester, perform this feat very prettily. When practising the "HANDS-SPRING IN THE CENTRE OF THE BARS" it is best to attempt it on a low pair of "Parallels," with plenty of width between the bars, for in learning it there is a liability to scrape the elbows. You must learn to overturn in the hands-spring before you can get into correct position to catch the bars again. We rather favour the hollow-back position for this feat, it enables you to keep in correct form, and looks decidedly better; besides, in this position two or three can be done in a swing, or a hands-spring and hands-balance may be alternated.

Fig. 8.

PARALLEL BARS.

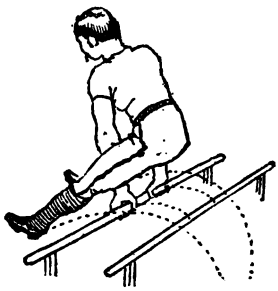

Fig. 9.

The "FROG LEAP OVER THE PARALLELS" is generally accompanied with scraped shins and other minor casualties in its early stages; but it is a fine exhibition of agility, cool nerve, and quickness of eye, and for these reasons we recommend it to "John Bull." COMMENCE by standing as in Fig. 1, only with the hands closer together, and practise the "Frog Leap" over the first bar, dropping in the middle of the bars; afterwards "Frog Leap" over the first, and catch the second bar with the hands, and finally "Frog Leap" over both bars. The most important point to remember is that the *hands* should jump to the second bar *much before* the legs. This feat can be varied by going THROUGH THE HANDS OVER THE FIRST BAR, and "FROG LEAP" OVER THE SECOND, without allowing the feet to drop in the centre of the bars. This feat requires no little care, and plenty of coolness and nerve. Without these essentials it were better to leave it alone, and go in for something more suited for you. The difficulty in the feat is the change from the first to the second part, from having the hands apart to rapidly closing them together; but in this, as in other advanced exercises, it is advisable to practise the different parts separately, until the whole can confidently be attempted. Practise, therefore, getting through the hands well, alighting upon the second bar with the hands together, until you have confidence to attempt the feat in one spring.

PARALLEL BARS.

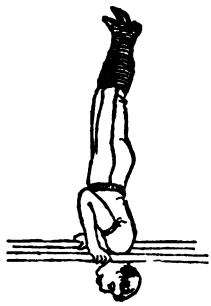

Fig. 10.

PIROUETTE ON THE SHOULDERS. — Almost every Gymnast can balance upon his shoulders upon the "Parallel Bars;" but if any difficulty is experienced, a hint to place the head well under the bar (see Fig. 10), upon which the shoulder is balancing, will be of service, and very necessary in this particular feat. AFTER having "pressed up" into the balance on the right shoulder, move steadily across the bars, until the left shoulder rests upon the left bar, as in Fig. 11. Now commences our difficulties. Without losing the balance, bend the head backward, until the chin is level with the bar, then slip the head over until the chest rests upon the bar, reversing the grasp of the right hand, and moving it a little forward (see Fig. 12). Then place the left hand on to the right bar in similar position to the right; now catch hold of the left bar close to the right shoulder, with right hand, ordinary grasp, slip the left hand along until opposite the right, then slowly raise the head over the bar again, until in the position of Fig. 13. Here move the body slowly over until the left shoulder rests upon the right bar. To push into long arm balance, walk along the bars, and handspring off, is a good finish. The practice of the Pirouette on the shoulders is of great advantage in all half-arm, or, as it is sometimes called, "SHORT-ARM BALANCES and WALKS," a favourite exercise with military gymnasts, we cannot say for what reason, as it is not a very graceful movement. The feat

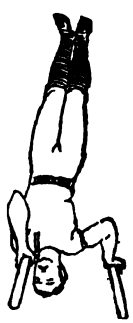

Fig 11.

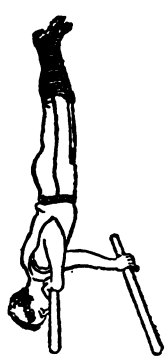

Fig. 12.

PARALLEL BARS.

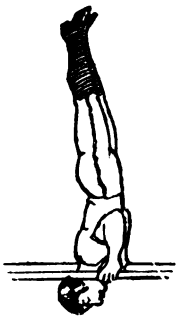

Fig. 13.

consists of walking along and between the bars in a perpendicular position, the feet being upwards, and the head between the bars, the arms are bent at the elbows, and the weight should be thrown alternately upon each arm, until each short stride is effected. We have seen Quartermaster-Sergeant Hawkins, of Aldershot, *jump* along in this position very neatly.

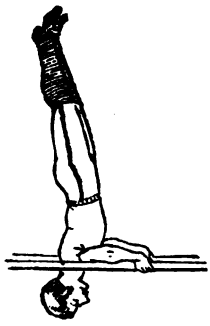

Fig. 14.

FORWARD ROLLS.—AFTER the last grind we shall be glad to try something easier and more graceful looking, and few feats look better than nicely executed "Forward Rolls." COMMENCE by swinging into the position of Fig. 14, and then, bending from the waist *only*, it is most important that the knees should be kept stiff, bring the feet over the head, and allow yourself to roll over forwards, as in Fig. 15; you will come either into the bent arm position, or, by opening the legs, astride the bars. After having thoroughly mastered this movement, the "HOLLOW-BACK FORWARD ROLL" should be attempted. COMMENCE as in Fig. 14, but instead of going into the position of Fig. 15, keep the back bent the reverse way, as in Fig. 17; keep the elbows projected outwards to prevent you from falling through the bars, and have your hands ready to catch the bars close to the elbows. An assistant should be ready to assist you in learning this graceful feat; but it is worth the trouble, it being far better "quality" than the preceding one, and a good effect is produced by rising into "Long arm-balance" between each roll alternately. You will find great diffi-

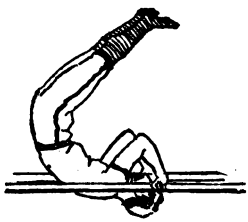

Fig. 15.

PARALLEL BARS.

culty in keeping in the "hollow-back position" when you roll over, the inclination to "double up" being very strong to resist; you must, therefore, be determined to *retain* the proper position in rolling over, and endeavour to anticipate coming over correctly by placing the hands on the bars close to the sides in obtaining the renewed grasp. If you should be fortunate enough to roll over correctly, a very firm grasp of the hands and rigid position of the elbows, accompanied by the impetus gained in coming down, will enable you to rise into a second one.

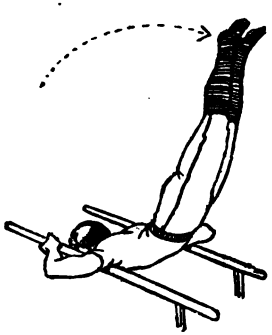

Fig. 16.

The "BACKWARD ROLLS," perhaps, exceeds the Forward ones in gracefulness, and are not so difficult to learn. COMMENCE by swinging, as in Fig. 16, with a *very firm* hold of the bars—*i.e.*, do not allow the arms to move about, for in this exercise they serve the same purpose that the axle does for the wheel. When a good momentum is secured, put all the impetus you can into throwing the body upwards and backwards, as in Fig. 17, keeping the knees stiff and the elbows projecting outwards. When the body reaches the perpendicular position, the arms may be straightened as in Fig. 18. As the body descends, resume a firm hold of bars again, as in Fig. 16, when you will be ready for another "Roll." J. V. Madgwick, of the Bolton Gymnasium; W. Carroll, J. Wild, in fact all the prominent members of the Manchester Gymnasium, and A. E. Jones, D. Templeton, and many mem-

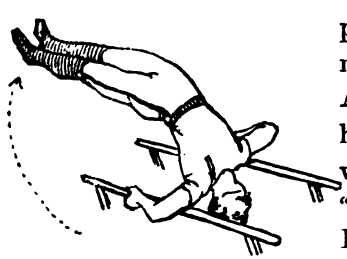

Fig. 17.

PARALLEL BARS.

bers of the Liverpool Gymnasium, were exceptionally good at these "Rolls." The principal difficulty that will be met with in learning them is at Fig. 17, when the inclination, as in the Forward Roll, to double up is very great. There is also an inclination which must be resisted—to bend the knees when the feet are passing the ground. Care should be taken to practise on parallels sufficiently high to prevent any possibility of this. The backward rolls, requiring as they do very little expenditure of strength, should be reserved as a finish to some combination. They look well immediately after the Forward Rolls, or after Hands-balance Walks. A pretty combination is to walk along the bars forward in the Hands-balance, turn around, and go in the Forward Rolls, and finish up with the backward ones.

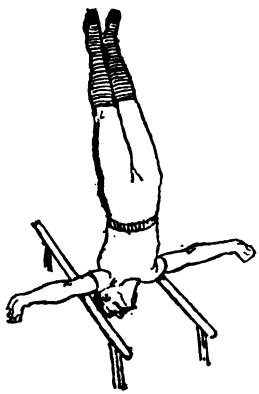

Fig. 18.

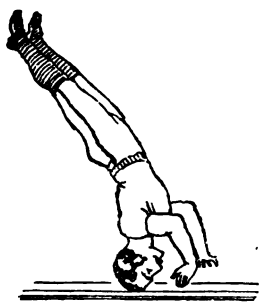

Fig. 19.

The "FLYING BACK ROLLS" is a development of the preceding exercise, which you must have thoroughly mastered before attempting this present feat. Commence as in Fig. 16, and when the position of Fig. 17 is reached, the body must be thrown with great impetus upwards, and slightly backwards, into the position of Fig. 19. At that point prepare to catch the bars again, as in Fig. 20, and, dropping into the position of Fig. 16, you will be ready for another. An assistant should look after you when learning this, lest you fall backwards. A row of these are very effective.

PARALLEL BARS.

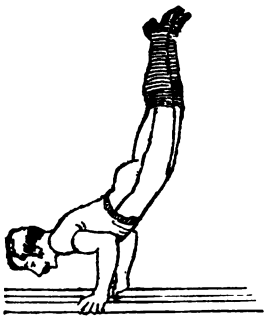

Fig. 20.

THE "FLYING BACK ROLL INTO BALANCE" is similar to the preceding, only when Fig. 20 is reached, you should immediately push up into balance. This is considered a feat of the first water. We never saw it performed better than by R. Oberholzer, the Assistant Director of the German Gymnastic Society; or G. Renshaw, late of Manchester, and now Director of the Sydney (Australia) Gymnasium. A very effective way to perform it, is to rise into the Hands-balance at the end of the bar, and maintaining the balance, walk into the centre of the bars; here halt, and slowly bending the arms a little, allow the body to fall backwards at full extent. When the arms are close to the bars, project the elbows outwards a little, and when they touch the bars, keep them *very firm* and *rigid* (see Fig. 16), to prepare them for the movement of Fig. 17, and finally of Fig. 19. Opportunity should be taken of the great impetus obtained by the downward swing to pitch the body high up above the bars, so that the Hands-balance position can be resumed.

HANDS-BALANCES.

One of the greatest ambitions of the aspiring gymnast is to be able to "achieve the hands-balance" on the floor, the Parallels, Horizontal Bar, Rings, or Trapeze, no matter where, as long as he is sure of his "balance." This is a very wise decision on his part, for the "balance" is everything in Gymnastics, and, perhaps some of us will add, in many other things as well. What, then, asks the enquiring pupil, is the golden rule to observe in achieving this *desideratum?* and we reply, *study* the *position* before attempting the feat in practice. The intelligent pupil will understand that it is easier to stand erect upon *his feet* in a natural, easy

manner, than in a doubled-up posture, with his knees bent, and toes turned inwards; so it is with the inverted position of standing upon the hands—the position must be natural and graceful. Proceed, therefore, to obtain a drawing of the hands-balance, done in good form (see Fig. 22); see how the limbs are *straightened*, the head held back, the slight bend from the *waist* over the head, the toes pointed, and all tending to preserve a graceful equilibrium, thus preventing unnatural strain upon the extensor muscles of the arms. Having satisfied yourself that you know the right and wrong position, proceed to practise it by attempting the feat on the ground, and about 18 inches from the wall; let the fingers be pointed forwards. If you do not manage to keep up, or feel otherwise uncomfortable, ask a fellow-pupil what the exact position of your body was, and you will find out and be able to remedy your error. After a little practice you must try to manage without touching your feet against the wall; and then attempt it upon the Parallel Bars. Now, very likely, the thought will occur to you:—"How shall I save myself if I fall?" This proves conclusively that you have the bump of caution, and will make all the better gymnast. The hand-spring, however, will easily save you, or, better still, a high side-vault will save time and strength. Your first attempts will very likely result in a slovenly balance (see Fig. 21); notice the bent legs and general awkwardness of the position. You will find it difficult to hold in this, as in all ungraceful positions. Persevere, therefore, in your endeavours to get rid of these defects. Do not forget to straighten your arms and legs, keep your head well back, and you will soon be able to achieve a graceful balance (see Fig. 22). In performing the

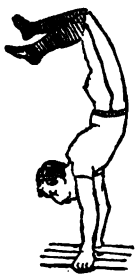

Fig. 21.

Fig. 22.

feat do not waste your strength in several swings before throwing into the position; a good gymnast never takes *more than one swing or spring* to perform any feat. When able to throw into a balance safely and easily, we might attempt the ELBOW BALANCE, which will be found more difficult than the ordinary one. We must, in the first place, obtain a good grasp of the bars, thumbs inside, and bending from the waist, bring the legs forward and then backwards in one swing into the required balance (see Fig. 23). It will be found necessary to bend well from the waist. A nice piece of work is to raise from Fig. 23 to Fig. 22, and back again, without losing the balance.

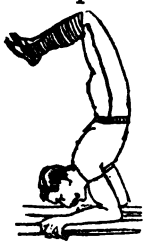

Fig. 23.

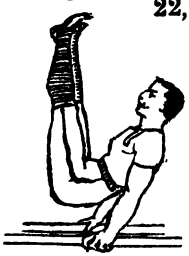

Fig. 24.

THE FORWARD BALANCE.—This feat will be found more a matter of strength than of balance, it requiring great strength in the abdominal, and also in the extensor muscles of the arms. First attempts generally result in the pupils losing their balance, and falling harmlessly backwards. Continued practice, however, will enable them to satisfactorily accomplish the feat, as shewn in Fig. 24.

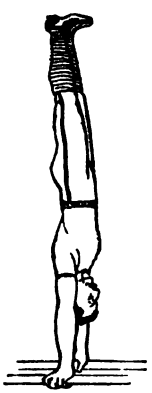

Fig. 25.

THE STRAIGHT BALANCE.—This is one of the most difficult balances on the bars, requiring great coolness on the part of the performer. When the pupil is in the balance, as shewn in Fig. 22, he must bring his head downwards until it is parallel and between his arms. While in this rather uncomfortable position, the legs must be brought forward until the pupil can see his toes, as shewn in Fig. 25. After accomplishing this difficult piece of work, return, if possible, to Fig. 22 in one movement, and then back again to Fig. 25 in a similar manner.

PARALLEL BARS.—Hands-balances.

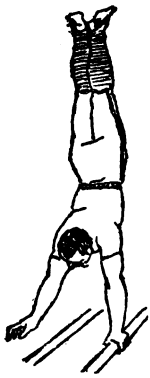

Fig. 26.

The Hands-balance upon One Hand.—This will be found a very uncertain feat, although we have had some success with it. It is best accomplished by leaning well over to one side—a little more than is shewn in Fig. 26—but do not leave go both hands until you are fairly sure of your balance. Keep the arm very still, and make provision to save yourself in the event of a cropper. If the pupil can manage the various balances described here, he is no mean gymnast, and therefore able to work out the various and difficult ways of raising into Fig. 22 other than the ordinary swing. But this we must treat of again.

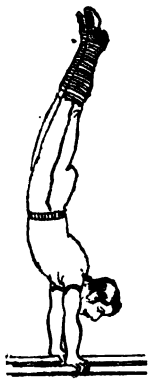

Fig. 27.

After having satisfactorily managed the "Hands-balances," let us put our knowledge into use and make an attempt at the "Pirouette Hands-balance," for this is one of the most graceful uses the balance can be put to. Commence as in Fig. 27, and, putting the greater part of the weight of the body upon the left arm by twisting from the waist over to the left side, gradually push over with the right hand until the body is almost perpendicular over the left bar, and then stepping over with the right hand rather close to the left, come into the Horizontal balance, as in Fig. 28; without pausing, lean over on to the right arm and step over with the left to the right bar, as in Fig. 29. It is not absolutely necessary to keep a perfectly perpendicular Hands-balance. We have seen this feat repeated around and around without any pausing, and a good method to understand the theory of it

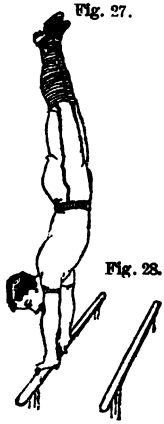

Fig. 28.

Fig. 29.

is to perform the same turns standing on the feet upon the bars; the requisite amount of turn and the time will then be understood. A nice variety of this feat is to perform the "HANDS-BALANCE WALTZ." To do this you rise into the Hands-balance at about a foot from the end of the bars, facing outwards; here cross over the Horizontal Bar, balance on the left bar, continuing the turn to the left side, make a little stride forward with the left hand as you go on to both bars. In your next turn on to the one bar, continue to make a still further advance forward, then as you turn around on to both bars to the left side it will be necessary to allow the body to incline backwards; in this way, by making small advances, you will gradually travel along the bars.

Fig. 30.

The "Hands-balance Jump Along" is no joke at any time, and should always be attempted early in practice time, before *all* the vitality has gone out of your muscles; and even then it is a grind. COMMENCE by practising jumping along the bars, with the legs resting on the elbows (see Fig. 30). This will get the *extensor* and *flexor* muscles in order for the attempt in the "Hands-balance" position. Rather slide along the bars at first with little steps (see Fig. 31). We remember that clever gymnast, Dr. R. S. Wayland, of the Dublin Gymnastic Club, jumping into the middle—*i.e.*, between the bars, by putting too much Celtic energy into his first effort. F. W. Douglas, of the same club, does this feat in very good style for so heavy a man; but there is no golden rule for "grinds." Practice will shew what is suitable for your particular individuality. The same may be said for "hollow back" pushes up into the

PARALLEL BARS.

Fig. 31.

"Hands-balance," in which some very strong gymnasts fail ignominiously. Others, such as Staff-Instructors Crawford, Hawkins, Wallace, and others of the Aldershot Staff, and F. Steel of the Liverpool Gymnasium, distinguish themselves to a marked degree. This shews that some consideration must be given to *time*. To shift the hands at the wrong *time* in the Grand Circle would lead to disaster; to use the strength at the *wrong time* would be equally unsatisfactory. Strong gymnasts who cannot do strong work may rely upon it that they use their strength at the wrong time. To perform the "Hands-balance Jump Along," it is not advisable to bend the arms too much, but to make the jump as much as possible from the wrists, for the more you bend the elbows the more work you give yourself to do.

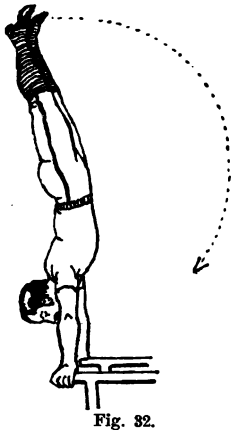

Fig. 32.

The "CUT AND CATCH FROM HANDS-BALANCE" is a very effective feat, especially if two or three are performed in a swing. Let us explain the movement. OBTAIN a balance at the end of the bars, and as you incline the body to come down again slightly overbalanced, bring the legs down astride of the wrists, as indicated by the dotted lines in Fig. 32. As the legs touch the wrists, slightly bend the arms, and suddenly straightening them again, with the head thrown well back, the effect will be to drop upon the feet at the front of the bars (see Fig. 33). To catch the ends of the bars again, instead of dropping upon the ground, the body must incline slightly backwards instead of forwards; the legs should meet in front, chair fashion, as in Fig. 3, and to repeat the movement in a swing a press into balance is necessary. To "Cut and Catch" safely and effect-

PARALLEL BARS.

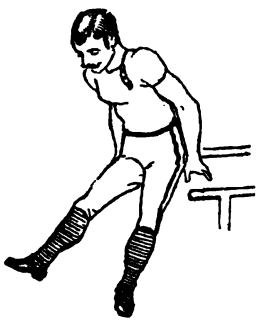

Fig. 33.

ively it will be best to practise it in the centre of the bars. Many bruises will be saved by this plan. To perform the feat in the centre of the bars is not so difficult as at the ends; perhaps the fact that there is less danger of scraped knees in the centre of the bars is the reason of this. As a preliminary, we would therefore advise that the cut over the ends of the bars and catch should be first learnt from the rest. This alone, if several are done in a swing, is very effective, and is certainly good practice for the other more advanced feats. A. E. W. Barker, of the Liverpool Gymnasium, used to perform this exercise very well, and generally as a prelude to some more advanced work.

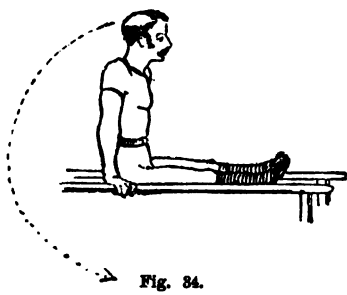

Fig. 34.

The "BACK SIT SWING" tries the patience sorely, as we can testify, for just as you imagine you have accomplished it, you discover you have not, but a knock on the elbows instead; but it is so effective looking, and requires so much reasoning out, that we recommend its practice by advanced gymnasts. COMMENCE as in Fig. 34, and keeping the elbows well in towards the body, fall back slowly in "Back Sit Swing" fashion, as shewn in Fig. 35; the feet will go over the head and on to the ground. This must be practised for some time to get accustomed to the turn, and to find out your "bearings" generally. The arms and knees must be kept stiff throughout, gradually swing down with a greater impetus until you are sure of your turn, and finally, to accomplish the feat, you must go down with a great swing, which will bring your head and shoulders *above* the bar again, as indicated by the dotted line in Fig. 35.

PARALLEL BARS.

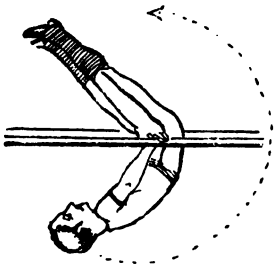

Fig. 35.

A little later than at this point you must loose the bars with your hands, and catching them again, come into the position of Fig. 34 again. G. Renshaw, of the Sydney Gymnasium, performs this feat very prettily, and the Author has performed it with a "HANDS-BALANCE" BETWEEN EACH "SIT SWING." To perform this you press into the balance at the end of the bars, facing inwards; keep the body very stiff in the balance in coming down from it to the rest; lean well forward with the head and shoulders until the body is horizontal above the bars; now bringing the legs forward, bending from the waist only, into the chair position (see Fig. 34), perform the remainder of the movement as already described. After each Sit Swing you press into the balance again, and recommence the feat.

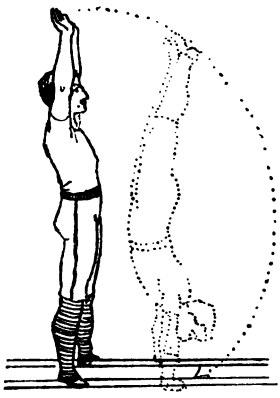

Fig. 36.

The "STIFF KNEES INTO BALANCE" is a good exhibition of strength. especially of the *abdominal* muscles. Commence by standing upon the bars, hands above the head, as in Fig. 36, and slowly bending downwards, without bending the knees, until the hands grasp the bars in front of the feet, as indicated by the dotted lines in Fig. 36; now, retaining a good grasp of the bars, raise the body into a Hands-balance, see dotted figure in Fig. 36, keeping the *arms and knees stiff*. You will find it a very stiff business altogether, and *do not* attempt *too* soon after dinner; it is not conducive to good digestion. A good method to show this feat off to advantage is to jump up on to the feet upon the bars. This, of course, will be practised upon

PARALLEL BARS.

low bars at first; but afterwards, by standing in the centre of and between the bars, a fairly good jump can be made. As you jump above the bars extend the feet apart, and toes outwards as you drop on to the bars.

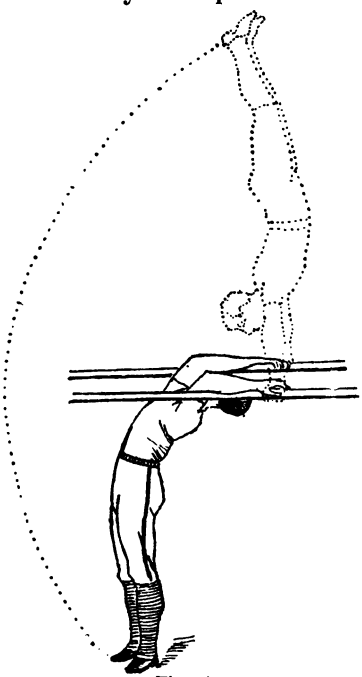

Fig. 37.

The "SLOW CIRCLE INTO BALANCE" is, well done, a feat of the first water. Stand between bars, lean backwards, and, bringing the hands over the head, grasp the bars as in Fig. 37. Now, with sheer strength of the arms, bring the body over, and when above the head, rise and circle into the rest. Instead, however, of allowing the legs to come between the bars, press into balance, as shewn by the dotted figure in Fig. 37. It will be found a little easier to practise this at the ends of the bars; indeed, it looks very effective done there, especially if performed in the style we have seen G. L. Melio, of the Leopold Gymnasium, execute it in. It is a very difficult piece of work to perform in the centre of the bars, keeping hollow-back position the whole of the time. Perhaps you have already found this out.

Be careful, fellow-gymnasts, in attempting for the *first* time the "JUMP ACROSS THE BARS." We invoked the aid of that prince of gymnasts, Quartermaster-Sergeant Hawkins, to look after us in our early attempts. Alas! put not your faith in princes. We had a bad quarter of an hour on that occasion at Devonport, and although it happened as far back as 1877,—

PARALLEL BARS.

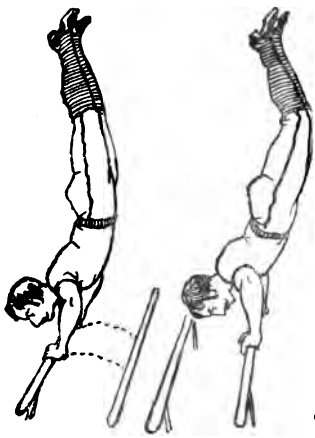

Fig. 38.

"Yet the thought of *that* cropper it hangs round us still;"

so put plenty of mattrasses about, and, "happy thought," leg guards. Even then go at it gingerly, being content for your body to go over at an angle of 45 degrees. Bear in mind that your hands should get a spring from the first bar, catching the second bar in hollow-back style. Wishing you luck and a "safe journey" over, we conclude this chapter, so full of "ups and downs," with the "BACK HAND-SPRING." Practise swinging to and from the position indicated by the dotted figure in Fig. 39, in order to accustom yourself to the inverted position. When you attempt the "turn over," have a couple of assistants, one at each shoulder, and keeping your hands on the bars *as long as you can*, keeping the arms stiff, endeavour to bring your feet over your head on to the ground. This can also be done from the "HANDS-BALANCE," so that it can be introduced after a combination. Now, a parting word of advice. In all exercises entailing any risk, take proper precautions. It is the *quickest* way to learn in the end, and will certainly prevent casualties.

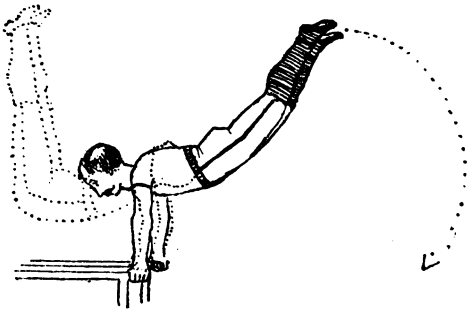

Fig. 39.

HORIZONTAL BAR.

The Horizontal Bar may be considered to be the key to all other apparatus, for proficiency upon it makes work and skill in acquiring feats upon the Rings, Trapeze, &c., comparatively easy. To become an advanced Horizontal Bar worker requires agility rather than strength; for very powerful men are seldom agile, and *vice versa*. In addition to plenty of vitality, skill, and *grace* above all, is necessary before one can claim to be considered a first-class worker. This latter quality applies to all apparatus, but particularly so to the "Horizontal," for there is nothing so pleasing looking in apparatus work as to see the graceful sweep of the "Arms-length" or "Grand Circle" into the balance, the easy "shift" of the hands, and the *abandon* swing through the air in the downward course, all done apparently without an effort. For it is a golden rule, "Endeavour to be graceful, and difficulties vanish;" the graceful is the correct position, and the effort causes less exertion; while the ungraceful is the incorrect position, and the effort causes more exertion. It is scarcely necessary to mention here that the Horizontal Bar is not very beneficial unless used in conjunction with other apparatus. There has perhaps been more progress made upon the "Horizontal" than any other apparatus, the probable reason being the great improvements made in the apparatus itself. Many of us, no doubt, can remember when the 2½-inch diameter bars were in vogue, making it almost impossible to do anything beyond strength work, a "Hock-Swing-off" or "Great Circle" in the old style on the wrists being regarded as wonderful. We cannot undertake to trace the origin of this apparatus; but it has often struck us that if we have obtained it from the Continent, they, with the unwieldy racks that are still found in many continental villages, must have obtained it from the spreading branches of trees, for their racks are little better even at this date.

HORIZONTAL BAR.

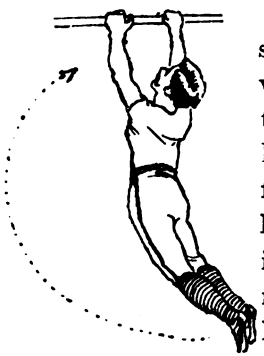

Fig. 1.

"It is too bad," we have heard men say, after seeing a weak stripling get up with the UPSTART: "*I* am much stronger than *that* fellow, yet *I* cannot get up like that." We tell him he is *too strong*, flattering his vanity, and condoling with him at the same time. What we mean is that he uses too much strength, and not sufficient skill. Truly the "Upstart" has proved very vexatious to many. We were rather fortunate over its acquirement. It was in the days of lanky, long-legged boyhood, when we had more ambition than muscle, we were wriggling with our hands upon a thin iron rod, and

"Vaulting ambition o'erleapt itself;"

Fig. 2.

and suddenly landed us above the bar—too much over. Our reputation was made, and many times per diem were we to be seen performing our only and particular feat.

The "Upstart," however, plays such an important part, that we propose to devote a chapter to its peculiarities. In the first place, swing in a graceful position upon the bar, the back bent slightly backwards, and don't take too much swing (see Fig. 1). When at the front swing—*i.e.*, the front of the bar—lift up the feet without bending the knees, and bending from the waist only towards the bar, indicated by the dotted line in Fig. 1, retain this doubled-up posture during the return swing (see Fig. 2), and when at the end of it push the bar away, keeping the arms stiff. A little practice will enable you to mount above the bar, as in Fig. 3. The Upstart, properly per-

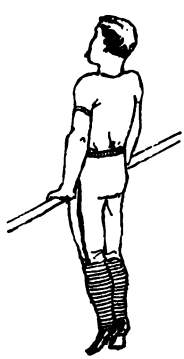

Fig. 3.

Fig. 4

formed, should be made without any apparent effort or exertion. The "UPSTART WITH CROSSED HANDS" is more difficult. Place your strongest hand underneath the other, and place thumbs underneath also (see Fig. 4). This will prevent you from twisting around. The most difficult "Upstart," however, is the "UPSTART WITH ONE HAND." This, as you may suppose, requires plenty of strength and freshness. Too much swing must not be taken (see Fig. 5), else down you come. Make your effort when in the Fig. 2 position; your right thumb will probably, along with the right ribs, suffer it first; but if you are strong enough you will be able to mount above to bent arm, and, if not too heavy, eventually to straight arm.

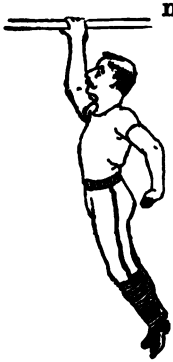

Fig. 5.

Another important point in regard to advanced work on the "Horizontal" is the necessity of being able to "get up" a great swing from underneath. This is especially necessary in "FLYING THROUGH THE HANDS." It is best to stand underneath the bar, and catching hold of it with the arms slightly bent, simultaneously bring up your feet, and shoot them upwards as high as possible, assisting by pulling with the arms. When at the end of the shoot, extend the body outwards, bending the back as you come downwards in the direction of the dotted lines in Fig. 6. When you arrive at the back of the swing, a judicious pressure on the

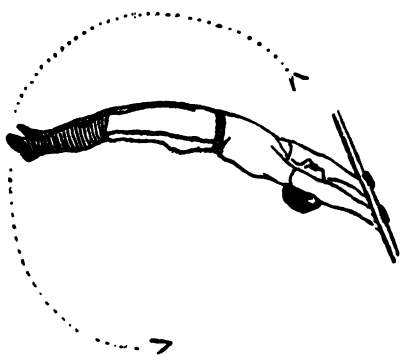

Fig. 6.

HORIZONTAL BAR.

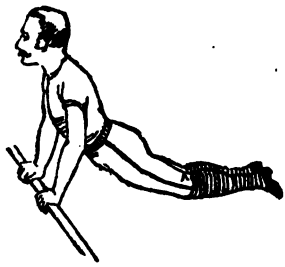

Fig. 7.

bar will bring you up in the "SWINGING RISE" (see Fig. 7), and if you have obtained sufficient impetus, and can pass your feet safely, you will be able to pass your feet through your hands on to the ground in the same swing. This is always a nice striking looking feat, and good class. Staff-Instructor Palmer, of Aldershot, performs it in the "hollow-back" position—a very fine performance. Another striking looking way of utilizing this swing is to perform the "FLYING FROG LEAP." When you come up as in Fig. 7 the legs should be extended outwards, with the hands rather closer than the artist has shown in Fig. 9. A little more swing is required than in passing through the hands, and we prefer our thumbs around the bar; but this is optional. Some men, such as A. Jenkins and R. Pulton, of the German Gymnastic Society, are exceptionally good at these "swings up." Herr Stempel, of the Albany Street Gymnasium, used also to perform this very neatly. Indeed, the German and Swiss schools can, we fear, give the "Britishers" a good start in leg movements generally. The same swing can be utilized also for the "FEET-SWINGS." In performing the latter, renew the grasp, and going down in the backward swing with stiff knees, if possible, get as much impetus as you can, helping your effort by throwing your head well back. In "coming up," slack the arms and knees; but we would advise this feat to be learnt upon a bar about 4 feet 6 inches high, with mattrasses underneath, and an assistant to help you. This swinging rise can be utilized for a very

Fig. 8.

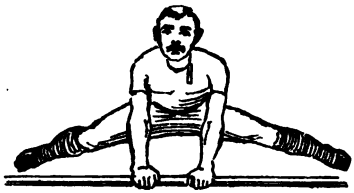

Fig. 9.

HORIZONTAL BAR.

Fig. 10.

striking feat—viz., "THE SWINGING RISE AND EXIT." GET up a good swing, and when above the bar a little higher than shown in Fig. 7, suddenly turn round by pressing and revolving upon the right hand, and carrying the left hand around with the body, thus coming into a sitting position on the bar facing the direction in which you have swung up. When in this sitting position you must rest *on the hands only*, and without pausing bring the feet backwards through the hands, alighting on the ground *behind* the bar.

The best effect that we have seen from the swing below the bar is the "TWISTING FEET-SWINGS," or as a Dublin audience, who graciously encored us for it, called it, "The Crow Trick." In performing this feat the hands must be kept close together, and a greater swing in the rise at the back is required. When the position of Fig. 9 is obtained, the right hand should be shifted to reversed grasp on the bar between the left hand and left leg. This will cause the body to twist around, and advantage should be taken of this to guide the feet on to the bar, facing the reverse way from the starting point; the right hand can now be replaced in its ordinary position, and the feet-swings may then be performed. To vary, one swing may be gone through, and when on the top of the bar, as in Fig. 10, the feet may be slipped off, and another swinging rise obtained, with another "Twisting Feet-swing," and so on until your vitality is exhausted, for this feat *does* exhaust one. Instead of the "Backward Feet-swings," the Forward one may be substituted, as in Fig. 12. The directions for the Backward Feet-swing reversed will be found generally suitable for the Forward ditto; but if any difficulty is experienced, the bar should be lowered and the exercise

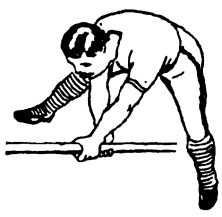

Fig. 11.

HORIZONTAL BAR.

Fig. 12.

acquired gradually and carefully. To do this sit upon the bar with the hands on with reverse grasp; lift up the feet upon the bar between the hands. Some gymnasts find it best to merely rest the heels upon the bar, leaving the greater part at the front, so that it may have length to travel around the bar. Now stiffen the knees, and going down with a good impetus, endeavour to come up and around, bending the knees as you are coming up. A few practices in this way ought to enable you to accomplish it satisfactorily.

Fig. 13.

While we are on the subject of "Feet-swings" we might as well attempt the "FOOT-SWINGS," *i.e.*, by placing *one foot* only on the bar. This is very effective, especially if the feet are changed frequently, and the leg held well aloft, see Fig. 13. Keeping the feet high up in the air, alternating the foot in each round, forward, then backwards, with an occasional "Arms-length" between, it looks very inspiriting. When going down in the back-swing the right arm should be kept very firm, as more weight falls upon it, the left knee should be slightly bent, and the right leg should be utilized in obtaining the impetus; swing it straight around, or it may bring you off. "THE FOOT-SWING FORWARD" should, of course, be done with the hands reversed; thumbs are best around the bar here. Place the right foot on the bar, the left leg well aloft in the air (see Fig. 14); keep the arms very stiff, and use the left leg in swinging over as a lever to obtain the impetus to bring you around; bend your elbows slightly as you are coming up. Both of these movements should be practised on a low bar

HORIZONTAL BAR.

Fig. 14.

first. If any difficulty is experienced in learning these feats, it will be advisable to practise it with the foot *between* the hands, and observing the general rules of the Feet-swings, go down with as much impetus as possible. If the leg which is not on the bar is used judiciously, it ought to be an easy matter to get up any amount of impetus. It looks very well to go around the bar changing the feet alternately.

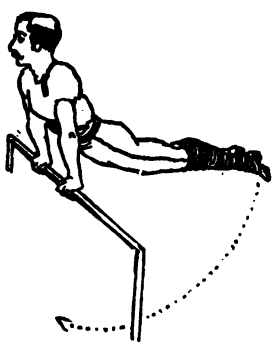

Fig. 15.

Another feature of the "Horizontal Bar" that should be cultivated is the "SHORT CLEAR CIRCLE," for so many things depend upon a good knowledge of it, and how well it looks to see them done as they ought to be. Commence as in Fig. 15; the arms, body, and legs perfectly rigid, the head and heels slightly curved backwards; the inclination will be for the feet to follow the dotted lines in Fig. 15; when the head is underneath the bar, a sharp pull with the arms will shoot the feet and body over the bar, as in Fig. 16.

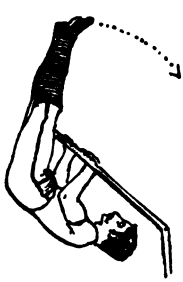

Fig. 16.

If no further effort was made the body would drop on the bar rather uncomfortably; it is at this point, after the shoot mentioned, that the "*shift*" of the hands should take place, *i.e.*, the hands, by a quick effort of the wrists, should revolve or shift from underneath to the top of the bar, at the same time let the back be arched again; the effect will be to bring the body upon the top of the bar, as in Fig. 17. This exercise can be repeated *ad lib.*, but many fine combina-

HORIZONTAL BAR.

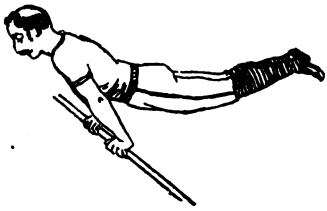

Fig. 17.

tions can be obtained from the movement, such as the push into the long swings or the "TURN INTO THE SITTING POSITION." This should be attempted just as the shift of the hands is being made, and consists of a sharp turn over the right side, releasing the left hand, and coming into a sitting position on the bar.

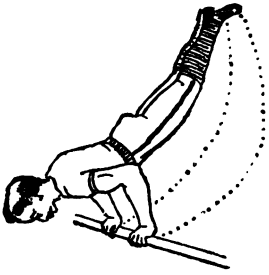

Fig. 18.

When you are "well up" in the "Short Circles" you will be able to "SHOOT INTO ARMS-LENGTH." This is best done by keeping the back well hollowed while circling; with a *quick* shift of the hands the body will be brought almost perpendicular. When in this position, something like Fig. 18, the body should be pushed away at "Arms-length." It is a good piece of work to put in a "SHORT CIRCLE AND ARMS-LENGTH" alternately. Perhaps the smartest piece of work from the "Short Circles" is to circle into the "Feet-swings." This is done by very few gymnasts, being a very difficult feat. COMMENCE the Short Circles as usual, and follow out the directions to "Shoot into Arms-length." When, however, the body is perpendicular, or nearly so, it should be bent from the waist, and the feet brought down upon the bar at the outside of the hands, in the direction indicated by the dotted lines in Fig. 18, and as shown more distinctly in Fig. 19. Look out for scraped shins, and falling over the bar head first; but perseverance will enable you to bring your feet upon the bar safely. When you can go once around in the "Feet-swings," and when on the top of the bar, the feet can be taken off, and another Short Circle and Feet-swing performed alternately.

Fig. 19.

HORIZONTAL BAR.

This quick shift of the hands can also be utilised in the "CIRCLE INTO BALANCE"—a very effective, and indeed brilliant movement. Commence by standing a little behind the bar, and jumping up to it with bent arms, shoot the feet upwards, and slightly over the bar, getting the body by a vigorous movement as high as possible. At this point make the quick shift of the hands already referred to, and placing the thumbs around the bar, push into balance.

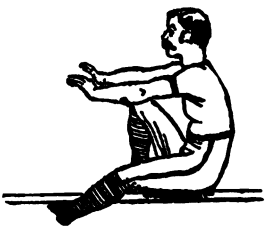

Fig. 20.

Let us now try something more simple, though equally as effective—viz., "THE STANDING BALANCE." We are sure that advanced gymnasts have often been struck with the different ways public audiences receive or applaud different gymnastic feats. A Hawkins, Crawford, or Chesterton may go on and almost strain themselves with a difficult "screw," which has involved many months of hard practice, and the (British public) will shrug their shoulders and talk of Portland and hard labour. We remember raising ourselves up to the chin by the aid of one finger only, upon the Rings, at a display at Glasgow some years ago, when a "canny" exclaimed: "Why does na the cheil use his hands?" Then Brown, Jones & Co. go on with the most elementary work, and are rewarded by thundering applause from the native critics. The B. P. are not far wrong at any time, and we confess that elementary work, *well done*, is a relief to screws, &c. This "Standing Balance," for instance, always looks well. COMMENCE, say, by upstarting on to the bar, and sitting on, bring the right foot on, close to the seat; hook the left instep under

Fig. 21.

HORIZONTAL BAR.

the bar, as in Fig. 20; hold your hands to the front, and a slight pull with the left foot pulls you on to your feet, as in Fig. 21. Practice will enable you to turn around, to face the front with both feet on, and finish with a row of Feet-swings. H. Smith, of the Warrington Gymnasium, performs it in this way—thus converting an elementary exercise into a very fine piece of work. A good way to finish the movement is to come off with the "HEEL-SWING." To do this you must take your feet off the bar as you are going down in the back-swing, and hook the heels on to it instead. When you are three parts around, leave go with the hands, and hollow the back before alighting on to the feet.

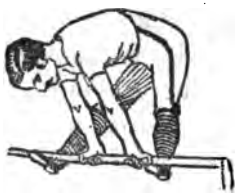

Fig. 22.

Here is another feat, viz., "THE TOES CIRCLE," that, although not difficult, can be made a great deal of; in fact all depends upon "How it's done," so let us try it in this spirit. COMMENCE with breasting the bar, or by an "upstart," hands reversed; now, bending from the waist, raise the feet upwards until insteps are under the bar, outside the hands, keep the thumbs around as in Fig. 22. When in this position, swing over forwards with arms and legs very stiff, and, keeping a good grasp with the hands and insteps on passing underneath the bar, utilise your swing by giving an impetus which will enable you to come up breasting the bar again. After you have mastered this fairly well, commence from the posi- of Fig. 23, elbows well under the side, head well back, and body horizontal. As the body inclines over forwards, suddenly double up from the waist and catch the bar with the insteps, as in Fig. 22; perform the circle, and as you come up, instead of allowing the body to rest against the bar, en-

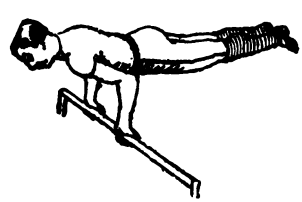

Fig. 23.

HORIZONTAL BAR.

deavour to swing into the position of Fig. 23, after which commence as before, performing the exercises alternately. After you have mastered this well, you might venture a further development of the movements by attempting the "ARMS-LENGTH AND TOE CIRCLE;" to do this you must throw into the Hands-balance, with hands reversed, and fall over into the long arm-swing; as you come up again on the reverse side, slacken the arms so that you will come up breasting the bar, when hooking the toes on you perform the "Toe-swing;" on coming up in it, throw up into the Arms-length at once, and repeat alternately.

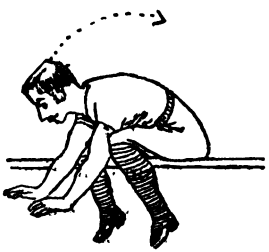

Fig. 24.

We cannot say that we admire "HOCK-SWINGS," it being an excellent incentive to headaches, "stars," and "croppers" generally; but done well, as we have seen E. C. Humel, of London, and W. Alexander, of the Liverpool Gymnasium, perform it, it is impossible not to admire it. Both of the above-mentioned finished the feat with a "Double Somersault" from the hocks before alighting on to the feet; the latter was well known for performing his "Hock-swings" very stiff, similar to the "Arms-lengths" in rigidity, as seen in Fig. 25. Performed, as we have said, under these conditions, the feat looks a grand one; but we fancy most of us perform it pretty much as it is shewn in Fig. 24. The great mistake of gymnasts learning the "Hock-swings" is to double up too much; instead, the body should be extended more like Fig. 25. Care however should be exercised in learning it in this position, for it is not without danger in its early stages. Proceed, therefore, to first hang *loosely* by the legs, then by one and the other alternately; learn

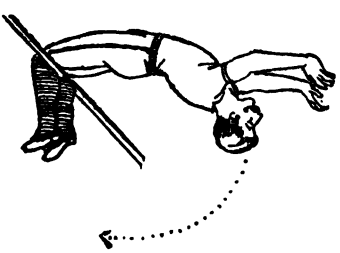

Fig 25.

HORIZONTAL BAR.

to take a slight swing, which afterwards increase, in hollow back style, then endeavour to perform your Hock-swing, supplementing your swing with a pull towards the bar with the hocks. To perform a number properly, it will be necessary to follow the "shift instructions" of the "Arms length," substituting the "hocks" for the hands. When practising this you are very liable to come off at the front, so provide mattrasses and assistants. Besides the "Double Somersault" already referred to, there are various "finishes" for the Hock-swings, such as the Pirouette swing off, the "Heels off," and "Back-out Somersault." The first named is performed by swinging on to the ground, and just before leaving go with the hocks, twist the body around; the "Back-out Somersault" must be learnt with assistance, and consists of throwing a back somersault from the top of the bar from the hocks.

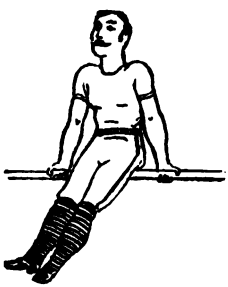

Fig. 26.

The "Shoulder Swing" is one of those feats that rather horrify those who are not accustomed to exercise, it has such a certain "damage your collar-bone" kind of look about it; but with the general gymnastic public it is always a favourite, so let us learn it. FIRST, it will be best to accustom yourself to swinging with your arms in the dislocated position (see Fig. 27), and when you can swing fairly high in this not too comfortable position, a commencement might be made. Sit on the bar, therefore, with the hands reversed, as in Fig. 26, and swinging the legs forward, push off at the same time with the hands, when the body will descend below the bar, as in Fig. 27. When the body is passing beneath the bar, use the opportunity to swing the legs backwards,

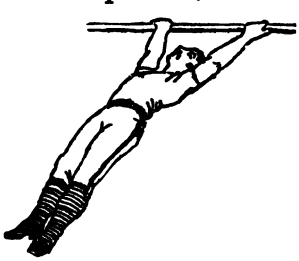

Fig. 27.

HORIZONTAL BAR.

Fig. 28.

to obtain impetus sufficiently to carry the body up in the swinging rise. When at the position of Fig. 28, the hands should be changed to the ordinary grasp. From this point a Short Circle can be made for purposes of a combination. The best combinations are, viz.:—The Shoulder Swing and Shooting Plymouths, or the Arms-length (reverse grasp), Shoulder-swing and ordinary Arms-length, of which we will speak again.

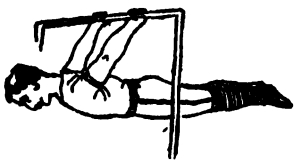

Fig. 29.

To perform the "PLANCHES," or "Levers," as they are sometimes called, is the ambition of most advanced gymnasts; and indeed they are seldom performed well, the prevailing fault being too much bend in the body. We have frequently seen a man get off the bar very red in the face, and with conscious pride at having performed such a feat of strength, whereas his body has been at an angle of 45° all the time. Until you know and feel you are exactly horizontal, it is best to ask an assistant to inform you of your correct position. WHEN learning the "Back Planche" (see Fig. 29), it is best to place the hands rather close together, so that the arms can get a good hold of the shoulder-blades. For the "FRONT PLANCHE" (see Fig. 30), it is best to practise at a low bar. To prevent fatigue and swinging when getting into position, bent arms are advisable at first, and the hands should be over the centre of gravity. The "ONE-ARM PLANCHE" should be practised from the "Back Planche" position, accustoming yourself to place all the weight on one arm before leaving go with the other.

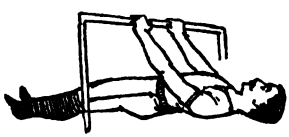

Fig. 30.

HORIZONTAL BAR.

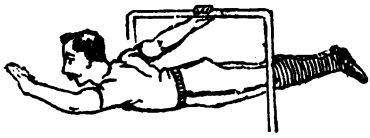

Fig. 31.

When you have practised this for some time, bring the arm well under the shoulder-blade, and gradually leave loose with the left hand (see Fig. 31). An effective finish is to revolve, and come down slowly until the body is in a perpendicular position.

A Chapter on Pirouettes.

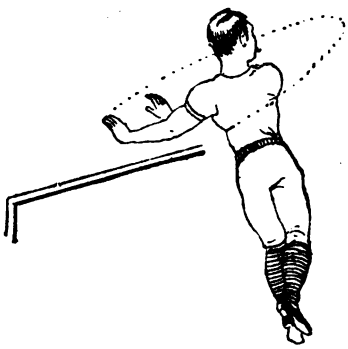

Fig. 32.

Of all the provoking, tantalising, and disheartening practices on the Horizontal Bar, that of the "Pirouettes" takes the pre-eminent position. Such, at any rate, is our experience; and we know of many others who are equally unfortunate. At one time turning them with supreme contempt for angles and space, we *see ourselves* catching the bar, and, feeling exuberant at our success, again and again repeat them, finishing with a "Shooting Plymouth" or some such shoot or twist off. The following night, at our annual display, we show our friends that interesting feat, the "Pirouette"—nay, secretly make up our mind to do at least half a dozen before commencing *something else*. Alas! *something else* comes first; for, confidently smiling in anticipation of success, we march up to the bar, throw ourselves lightly upon it, take a graceful hollow back swing, and at the back rise turn "——." Dear me! what a flounder, to be sure! and on the floor! Swiftly we pick ourselves up, and, alas, repeat the catastrophe! Is it not too bad, with young Spifkins of the

HORIZONTAL BAR.

Hercules Gymnasium looking on, too. He shrugs his shoulders at our third failure, and *doubts* if we ever turned a pirouette. Disgusted, we give "pirouettes" a long holiday; then feeling fresh again, we renew the attack. Not feeling anxious to "flounder," we put the bar at 4 feet 6 in. high, and at first, with very little swing, manage to turn in the perpendicular, and in this way gain sufficient confidence to take a hollow back swing. When at the back swing, we endeavour to rise with stiff arms until the head is above the bar, then with a push with the right hand, and a slight pull with the left, and keeping our feet well behind with hollow back position, we commence our turn. (See Fig. 32.) While in the air, *waiting* until we *catch* or *flounder*, we must not endeavour to anticipate, else we will probably get out of position and make our flounder a certainty. We wait, therefore, with both hands up, and are rewarded by catching the bar, thus putting us into position for "another one." After this we gradually practise on a higher bar. We have to come to the conclusion that strength and light weight is not necessary, nay, detrimental to performing good pirouettes. We find the long, loose-limbed, knock-kneed, and spindle-shanked individual has indeed an advantage, presumably in ballast, over the strong and lithe gymnast, who generally puts too much effort in his arms. There are of course exceptions, notably Mr. T. Renshaw, of Manchester, and Mr. F. Walsha, of the London Polytechnic, both of whom we have seen twist pirouettes in fine style. When able to master them well, what exercise can compare with them? The light, exhiliarating feeling which one feels in the back rise, the uncertain twist in space, the satisfactory catch, all combine to make that "vexatious pirouette" one of the most fascinating and satisfactory exercises on the Horizontal Bar.

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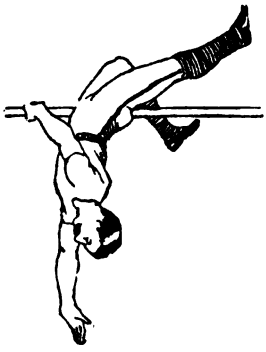

Fig. 33.

The artist is going to make us do the "ONE ARM PLYMOUTH" in impossible style—see Fig. 33—but as we cannot do the feat he has set us, we will attempt it by bending the *right* knee and straightening the left. COMMENCE, then, by hanging on the bar with the right hand, and lifting on the legs, obtain a good hold with the right, stiffen the left and endeavour to pull the body over the bar until you come up into a sitting position. The main thing to remember is to do everything with steady pulling.

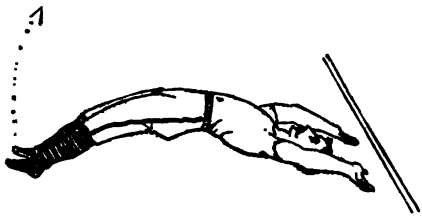

Fig. 34.

The "BACK-AWAY," *i.e.*, the "*Back* somersault *away* from the Bar" (see Fig. 34), is a graceful finish from the "Arms-length," and although comparatively easy, should be practised with care. First, practise swinging into the necessary position without leaving go with the hands, something like Fig. 6. This can be either obtained by a swing from below or above the bar. After having obtained the necessary graceful bend of the body, lungers—*i.e.*, a belt with a rope at each side—should be used. An assistant at each side holding the rope will ensure safety while the first attempt is made. After a few trials, in which care should be exercised to retain the correct position, the "Back-away" will become easy. The "FORWARD-AWAY" is the reverse somersault to the last named, and requires the same care in practising. The lungers should

HORIZONTAL BAR.

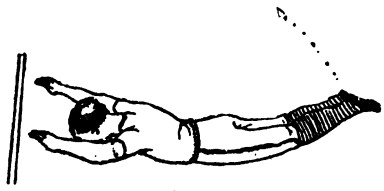

Fig. 35.

be again used, and when, by a back-swing, the position of Fig. 35 is reached, the body should be suddenly doubled up, the knees brought to the chest, the hands upon the ankles. This will bring the body around on to the feet in a forward somersault. The late W. Alexander used to turn *twice* in the air in both of these somersaults from the "Arms-length;" but although we acknowledge the daring of the feat, we consider single somersaults ought to be sufficient for the ambition of any gymnast. Both somersaults can be thrown from the Arms-length. With the increased swing that this gives, discretion must be used in not turning the somersault too high, for it tends to bring the feet upon the bar. The safe rule perhaps to observe is to loose your hold when the body is level with the bar.

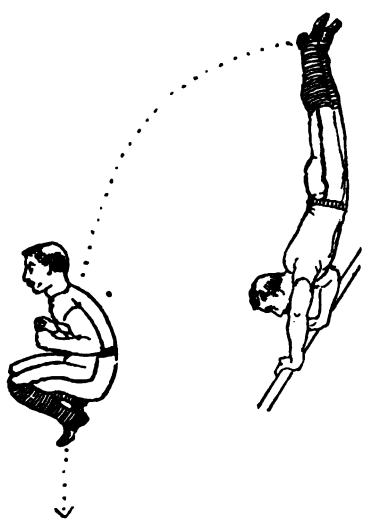

Fig. 36.

The "HANDS-BALANCE" should be practised if only for the advantage it gives in learning the "Arms-length" afterwards. It is an uncertain feat, principally through the fault of the gymnast himself, who generally swings up into it in a half-hearted style, arms and legs bent, making hard work for himself. It is far better to throw up into the balance at fullest extension of arms and body, like we have seen E. Sully, of the Exeter Hall Gymnasium, who has a very sure and graceful balance on all apparatus. If you should overturn, you can save yourself by

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the "Side Vault," "Hand-spring," or the "JUMP THROUGH." The latter should be practised on a very low bar. You must, on overturning in the balance, bend the arms slightly, and suddenly stiffening, the effect will be to bring the body over the bar, where the hands have been, to the ground (Fig. 36). The "ONE-ARM HANDS-BALANCE" (see Fig. 37), is a still more uncertain feat than the last-mentioned; but we have seen Staff-Instructors Hawkins and Crawford perform it repeatedly, resuming the ordinary balance afterwards. The right arm must be kept very stiff, the body inclining slightly over the supporting arm, to form the centre of gravity. The thumb extended horizontally on top of the bar sometimes assists the balance.

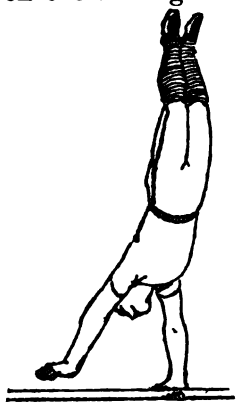

Fig. 37.

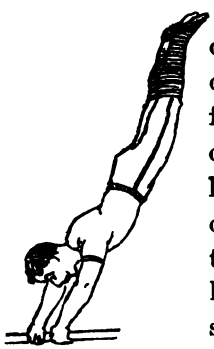

Fig. 38.

The "ARMS-LENGTH" or "Grand Circle" is one of those movements that *looks* more difficult than it really proves in practice; it either frightens or fascinates onlookers—in fact, it depends on "how it's done." We were once hooked by an amateur gymnast, who drew us over to the bar and whispered in a sepulchral tone: "Come and see me do my *last* 'Arms-length.'" We thought he premeditated suicide, but it appeared he had only promised his fair one not to put his Adonis-like form into danger any more. We went, *saw*, and thought the fair one a sensible young woman; but when done as it ought to be, it looks a splendid feat. In throwing out for the swing—see Fig. 38—throw up almost into a balance, and stiffen the arms, body, and legs immediately; after you have passed underneath the bar and are on the front, in a corresponding

Fig. 39.

angle to that in which you commenced your swing, complete the impetus that the swing has given you by throwing the body over the top of the bar into a "Hands-balance" (see Fig. 39.) It will be found at this point that the hands are awkwardly held back under the bar, and a sudden "movement" is required from the wrists to "shift" the hands from underneath to the top of the bar—(see Fig. 40) — when you will be ready for another swing. The golden rule to remember is—"Keep the arms, body, and legs as rigid as you can, and describe as great a circumference *away* from the bar as you possibly can while going around.

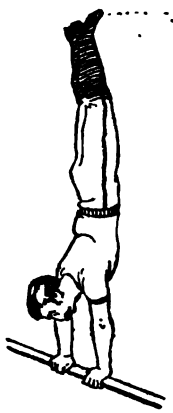

Fig. 40.

Having mastered the "Arms-length" all right, we must now attempt the "HALF-TURN." The turning part of this movement can be practised with advantage on a low bar from the Hands-balance position. On attempting it from the Arms-length, commence as in Fig. 38, and shifting a little earlier than usual, the body will not quite come up into the Hands-balance. Here, instead of turning sideways on to the ground, make a good turn around, facing the bar in the opposite direction, catch with the hands, and after going around once in the Arms-length, perform another turn on the top—see Fig. 41—and repeat.

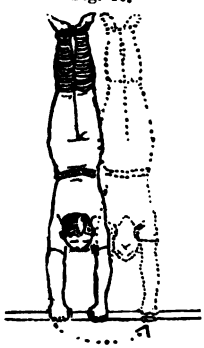

Fig. 41.

The ARMS-LENGTH AND FEET-SWINGS was one of our favourite exercises. AFTER going around in one Arms-length, and when in the Hands-balance on the top, bend from

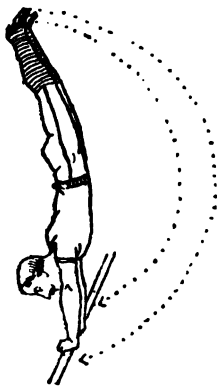

Fig. 42.

the waist and bring down the feet on to the top of the bar, as indicated by the dotted lines in Fig. 42. After performing one or two "Feet-swings" throw out when on top of the bar into another "Arms-length," and then down again on to the feet, performing "Arms-lengths and Feet-swings" alternately. This is admittedly a very difficult feat. It can also be varied by the "Arms-length and Feet-swings" being performed in the reverse direction.

A very pretty way of varying the Arms-length is to sit upon the bar with a hand at each side, and lifting the feet out between the hands backwards, swing immediately into the Arms-length, and having performed a few, to resume the sitting position on the bar again, the most difficult part of the feat. You must, however, in the last swing go around with a very firm grasp, and when almost in a Hands-balance, bring down the feet between the hands.

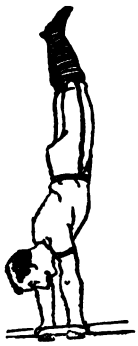

Fig. 43.

The "REVERSE ARMS-LENGTH" is not so difficult to learn as the ordinary ones, although no doubt it is harder work—*i.e.*, if there is any hard work about these swings. There certainly is very little if the proper conditions are observed, viz.:—to keep the arms, body, and legs at full extension away from the bar. BREAST the bar with reverse grasp of hands and thumbs around—for this latter reason a thin bar is best, as it is for most things—throw into the "Hands-balance,"—(see Fig. 43.) On the body falling over from the balance, stiffen away from the bar as much as possible—see dotted horizontal figure in Fig. 44—passing underneath, a pull, the result of the swing, will be felt that will take the

HORIZONTAL BAR.

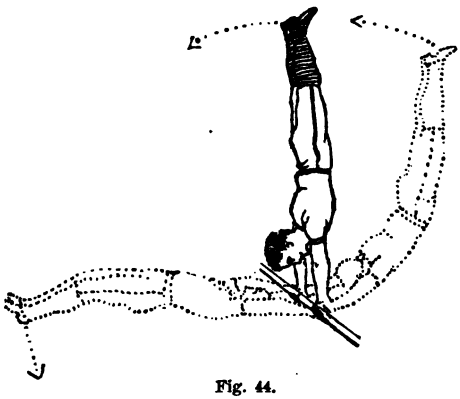

Fig. 44.

body upwards. (See the dotted figure in Fig. 44.) If you do not obtain, through not stiffening in swinging down, sufficient impetus to carry you up again on the opposite side, it may be necessary to bend the arms a little; this ought to bring you up in the half-arm balance, when straighten the arms immediately before you swing over again, as in Fig. 44. A little practice will enable you to get round satisfactorily. The most scientific combination on the Horizontal Bar that we know of, is to swing around three or four times in the reverse Arms-length, and when in the Hands-balance, come down slowly with the feet through the hands; throw out into the shoulder swing—see Figs. 26 and 27—and having performed the latter, shoot into the ordinary Arms-length from position of Fig. 28; now vary with the Arms-lengths and Feet-swings—see Fig. 42—finishing with a Back-away or Jump Through.

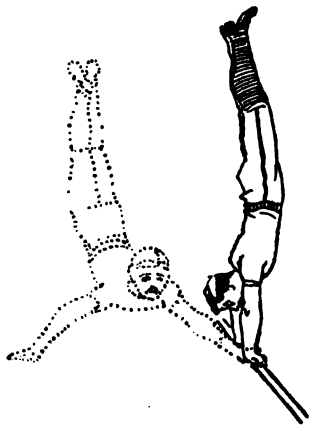

Fig. 45.

To put a graceful finish upon the "Arms-length" is very important, and the "ARMS-LENGTH AND VAULT" is one of the best and easiest ways of concluding the reverse Arms-lengths. This should be practised on a low bar from the Hands-balance; throw, therefore, up into the Hands-balance with reversed grasp, thumbs around,

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see Fig. 45. Whether you obtain the balance or not you should endeavour to turn to the right side, retaining a graceful position—see dotted figure in Fig. 45—until the feet reaches the ground. When this is sufficiently mastered, a quicker twist should be practised, until you can easily turn around—face and catch the bar,—see dotted figure of Fig. 46. Now attempt them after the "Arms-length;" care should be taken to keep time, and not turn too soon or too late. The "ARMS-LENGTH and TURN" is a very pretty feat. This learnt, the "Hand-spring" should be attempted from the position of Fig. 46. A more difficult feat is to finish these "Arms-lengths" with the "Jump Through,"—see Fig. 36. This also should be practised on a low bar, in order to first get the "Jump Through" safely. A very difficult feat is to turn on the top of the bar and go around in the same direction that you have come from. This reverse Arms-length and "PIROUETTE on TOP" is rather dangerous, as you are apt to slip sideways. We advise the turn, therefore, to be practised upon a low bar.

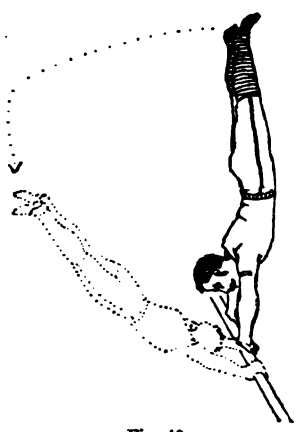


Fig. 46.

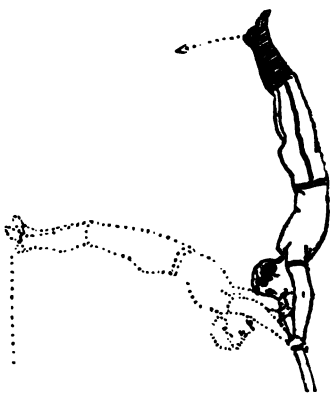


Fig. 47.

A pretty piece of work, trying one's nerves, is to change from the ordinary "ARMS-LENGTHS TO THE HANDS REVERSED." The usual method to change in the "Arms-length" is, of course, to perform the reversed grasp swings first, and at the back swing merely to change the grasp,

HORIZONTAL BAR.

going into the ordinary. Now we will reverse it, performing the ordinary Arms-length first, and the reversed grasp swing afterwards. When you reach the perpendicular position of the Arms-length—see Fig. 47—and the body is inclined to fall over in the Hand-spring, lean slightly over on the right arm and change the left hand to reverse grasp; then lean over on to the left arm while you change the right hand to reversed grasp; this done, swing down in the reversed grasp Arms-length,—see dotted figure in Fig. 47. The "PIROUETTE ARMS-LENGTH" is one of the most difficult feats on the Horizontal Bar. COMMENCE as in Fig. 48, and when at the end of the "beat" or impetus gained by the swing, make a half turn to the left, and leave loose with the right hand, placing it to the side of the left reversed grasp—see dotted figure in Fig. 48—the left hand will fall naturally into the same. On obtaining the balance, perform the "Arms-length with reversed grasp;" great care must be taken in learning this feat. There are many other feats upon the Horizontal Bar that are full of interest, and that require all the qualities of strength, skill, and courage one can muster for them; but these we leave to the ingenuity of the athletic gymnast himself.

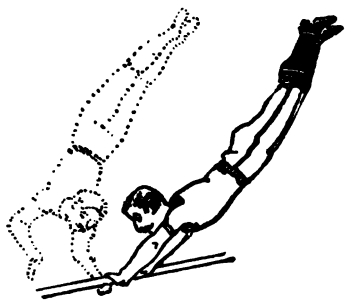
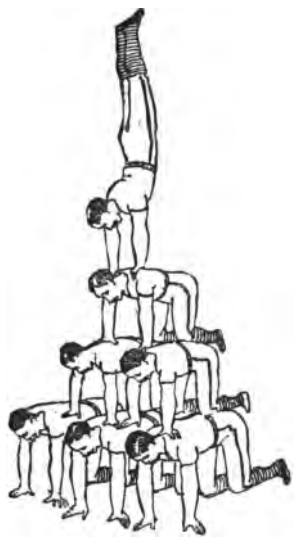


Fig. 48.



THE TWO BARS.

The Two Bars should be from 7 feet to 8 feet apart to suit. Although the exercises upon them do not, as a rule, require the same amount of strength and skill as the single Horizontal Bar, yet they provide infinitely more scope for nerve and grace of movement, both very high qualities to possess. What, for instance, looks prettier than a "Straight Jump" and "Half-turn" back again in the same swing? Or what requires more nerve than the attempt to "Back-away and Catch" for the first time? Modern experts upon this apparatus seem to sacrifice "grace of movement" to difficult work—a mistake, we think, from every point of view. It is surely better to see a "Straight Jump and Half-turn" performed gracefully than a "Back-away and Catch" performed in an ugly manner. The one is beneficial, and gives the idea of useful design; the other is dangerous, and suggests to onlookers premature suicide. Then, if the exercises upon the "Two Bars" are intended to give pleasure to onlookers as well as to the participators, cultivate by all means graceful and simple work, and your efforts will be much better appreciated than they would be if abnormally clever. The great professional performer "Avolo," in this way gave much pleasure to the many thousands who witnessed his graceful feats.

THE TWO BARS.

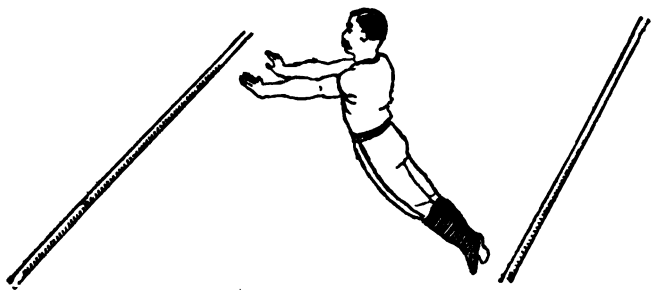


Fig. 1.

The "STRAIGHT JUMP" is, although the most elementary exercise performed upon the "Two Bars," one of the most difficult to do properly—*i.e.*, to fly, as it were, through space, retaining a graceful position from the time you leave the first bar till, mounting a little above the bars *en route* (see Fig. 1), you catch with extended arms the second. FIRST, let us learn the correct position to jump. Swing, therefore, in graceful position on the first bar, the arms and legs stiff, the back slightly bent, and the heels together. On the return from the backward swing, and just before you pass underneath the bar, the legs, kept stiff, should be raised from the waist in front to the height of about 18 inches. When the body has passed under the bar, and is almost at the end of the front swing, press the legs backwards, bending from the waist only. This gives the forward impetus (see position of Fig. 1). For the jump you must be content at first to jump but a short distance; but after a little practice the full distance will be travelled with perfect ease. A very good effect is produced by, when catching the second bar, to continue the jump off, and making a half-turn, catch the second bar on the opposite side. If this is done neatly, the body will be in position to repeat the "straight jump" back again, and so on for two or three times.

THE TWO BARS.

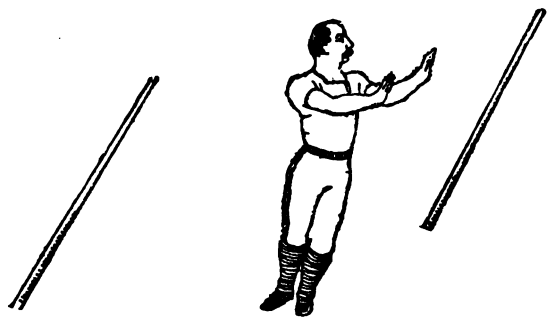


Fig. 2.

The "HALF TURN" is another very pretty movement. It is generally performed in a swing after the straight jump. It should be learnt carefully, for first attempts generally end in sitting upon the mattrass, on account of the difficulty in keeping the body in the perpendicular. COMMENCE practising to drop on the feet on the ground after the back swing, facing the return bar, a yard or so will suffice until you have obtained sufficient command of the perpendicular position; then attempt it from bar to bar. Take a gentle "hollow-back" swing, and when on the return backward swing, endeavour to obtain a good lift with the shoulders, without interfering with the position of the body; this ought to mount you above and at the same time to carry you towards the second bar. When you have nearly exhausted the end of the impetus gained in this way, stretch out the hands (see Fig. 2) and catch the bar; if the bar is caught fairly, with the feet behind, it will put you in the right position for attempting a repetition of it, or to go into some other movement. Two or three performed consecutively look very well, especially if a graceful position is retained. By way of variety a swinging change, as described in the "Straight Jump," can be made on each bar in this way, performing the straight jump and half turn alternately.

THE TWO BARS.

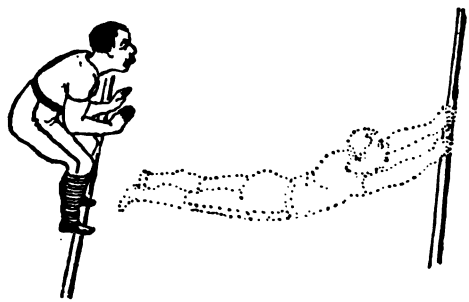


Fig. 3.

"JUMPING FROM FEET TO HANDS" will be found easy, but to do it as we will describe, it will require care and judgment. First, jump in the ordinary way in order to gain confidence, *i.e.*, stand upon the first bar, and jump towards the second, catching it with the hands; arms to be kept bent, in order to prevent any jerk when catching. Now practise it in the manner we have referred to, viz.—STAND upon the bar as in Fig. 3, and leaning forwards, gradually extend the body in front as much as possible, until the figure is almost horizontal; then, as you find yourself slipping off the bar, give a gentle push with the feet and catch the second bar, as indicated by the dotted figure in Fig. 3. If you do this movement correctly you will find it easier work, and with no jerking action, as generally accompanies the jumping with the body doubled up. After catching, perform a swinging change with the hands, facing around, upstart up, put your feet on, and jump across back again.

The "JUMP FROM FEET TO FEET," *i.e.*, to stand upon one bar, and jump on to the feet upon the second. We advise this rather risky feat to be practised upon bars about four feet apart, and the distance then gradually increased. When alighting upon the second bar, endeavour to do so upon the arch of the feet, bending the knees slightly at the same time.

THE TWO BARS.

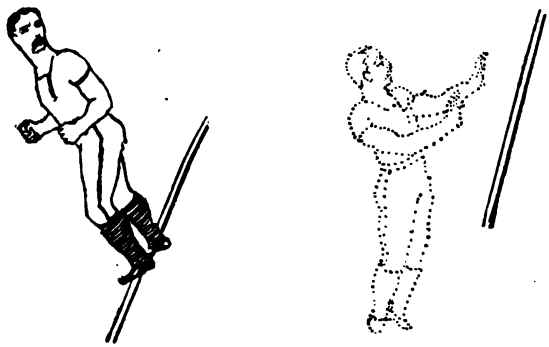


Fig. 4.

After having performed the last exercise to your satisfaction you might attempt the "HALF-TURN JUMP," as it makes a very nice movement if performed in conjunction with the previous exercise. COMMENCE by standing upon one bar with your back turned to the other, lean slightly backwards, and as you do so look over the left shoulder and jump, catching the second bar as indicated by the dotted figure in Fig. 4. On catching, an upstart with feet on will put you in position for another jump. Although the actual jump is only here described, it must be understood that it can be performed after various exercises; for instance, go around in two or three feet swings, and on coming up to the top, loose the bar with the hands (see Fig. 4), turning around and making your jump; or it can be prefaced with different exercises. One very good movement is to swing around the first bar in the *forward* feet swings (hands reversed), and as you rise on the top, jump on to the second bar, catching it with the hands; now rise with the upstart and perform another forward feet swing, and as you rise on the top, perform the Half-turn Jump again, repeating the movement if desired. In all of these jumps care should be taken not to catch the bar with the body doubled up, but extended, so that you can more easily perform your combination.

THE TWO BARS.

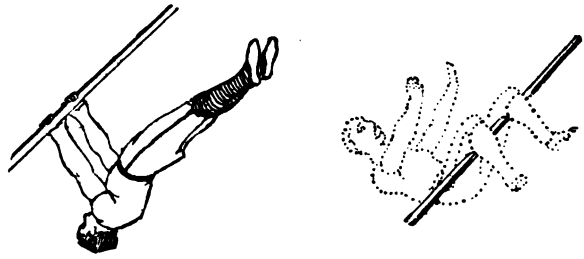


Fig. 5.

The "HOCK-SWING THROW" must be first practised on bars about 4 feet apart, afterwards increasing the distance gradually by 6 inches at a time, until the full length is reached. At the short distance the practice should consist of shooting or swinging from one bar, to alight gently, and in the correct position, on to the hocks on the second bar. When the full distance between the bars is reached, take a short swing with the hands below the bar, and when at the back, bend from the waist and lift up the toes to the bar; then shoot out in front with the feet, assisted with a vigorous pull with the arms; this will carry the body on to the second bar legs first. When the legs are over the second bar, bend the knees and swing off (see Fig. 5). It makes a pretty movement to perform a row of hock swings on one bar, and taking the legs off at the back, shoot on to the second bar and perform another set of hock swings. This and many other exercises will suggest themselves with continued practice; for instance, the same shoot will enable you to alight upon the second bar upon the feet and hands, ready for the feet swings. To make this "FEET-SWING JUMP" effective, one or two feet swings should be done on the first bar, and as you are descending at the back, take off your feet, make the shoot, and alight upon the second bar, repeating the feet swings. We need scarcely point out the desirability of providing proper precautions against possible slips in these movements; have, therefore, reliable assistants at hand when making your early attempts.

THE TWO BARS.

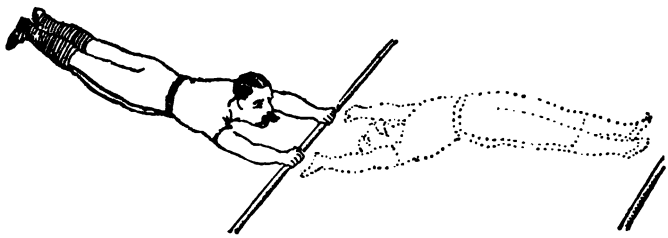


Fig. 6.

We have frequently remarked that in order to become an advanced or distinguished gymnast it is not necessary to acquire dangerous feats, and we still hold to this opinion; but as some gymnasts have a different definition for the term "dangerous" than others, we have inserted a description of the "BACK-AWAY AND CATCH." This is certainly a splendid feat, especially when performed with the ease and grace that characterised its performance by the wonderful professional performer "Avolo" and the late W. Alexander. To the former the English public owe very much for the great pleasure which his original and graceful work gave them; while the latter will be long remembered for his brilliant work in feats such as we are about to describe. COMMENCE by learning the *necessary* "Back-away"—*i.e.*, one within the distance of 7 feet 6 inches, with the hands outstretched in front. This may be learned best off a single Horizontal Bar, after which a cord may be suspended at a distance and height to represent a second bar. Endeavour now to catch this cord.

THE TWO BARS.

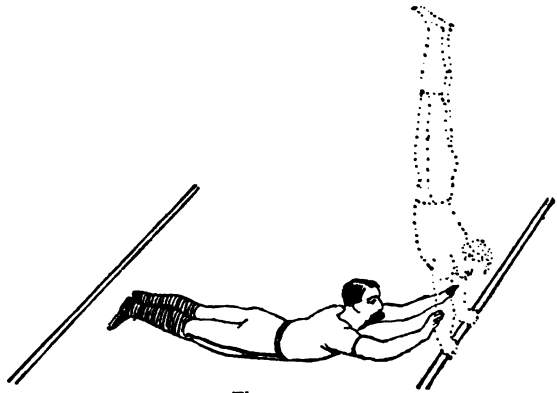


Fig. 7.

When the cord can be readily caught, the Back-away between the bars may be attempted. A perfectly hollow-back position must be preserved, and you must leave go at the *very end* of the impetus, to enable you to turn within the distance (see dotted figure in Fig. 5); hold the head well back, and *open your eyes*. On catching the bar stiffen the arms and extend the body, thus putting you into position for getting into the "Arms-length" afterwards, when a good "beat" or swing up at the front will bring you up into the "Grand Circle," as seen in the dotted figure in Fig. 6. When you have achieved this feat, the "ARMS-LENGTH AND BACK-AWAY BETWEEN," viz.: Arms-length on the first bar, Back-away between bars, catch on the second bar and continue the Arms-length. A third bar is frequently used, but the directions are the same, so enabling the Arms-length and Back-away to be performed alternately between each bar. The three bars make a very good item for displays, especially when two gymnasts work on the bars simultaneously, swinging together or passing and repassing each other; but in swinging around, the gymnasts should be careful not to collide against each other. For instance, when three gymnasts are working simultaneously, one upon each bar, the worker upon the middle bar should work slightly to the right side, the others to the left.

RINGS.

The "Rings" are a very good, developing apparatus, continued practice upon them bringing out the broad muscles of the back, the *pectorals*, as well as the *bicep* and *flexor* muscles of the arms, to a remarkable degree; indeed almost abnormally so, unless counteracted by practice upon some other apparatus. The exercises upon them give scope for the display of strength, grace, equilibrium, and in a lesser degree, agility. The credit of developing these movements is principally due to the Manchester School of Gymnastics; and we question whether the modern school of gymnasts have equalled, and certainly not excelled, the work which we saw performed about 1875 by the Brothers G. and T. Renshaw, Whitehead, Inglefield, Madgwick, Carroll, Melio, and others. Nor of late years have we seen the same average of ability as shewn by E. Alexander and the champion eight of the Liverpool Gymnasium, viz.: H. B. Williams, A. E. Jones, W. H. Jackson, P. Entwistle, D. Templeton, A. E. W. Barker, P. Cookson, and Dr. Gough, who in the national competition of 1889 defeated all-comers in the aggregate number of marks which they obtained, and each of whom, to show their quality of work, performed in their combination the difficult feat known as the "Iron Arm" (see Fig. 27). We advocate the use of Rings about 10 inches diameter, made of $\frac{5}{8}$-in. iron, and covered with leather. This size gives a better chance to perform balancing feats, and the additional weight tends to make the ropes swing steadier. The ropes should be from 9 feet to 12 feet in length for swinging exercises. For somersaults the shorter length will be found best, and for other feats the longer is more suitable.

RINGS.

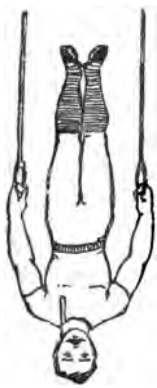


Fig. 1.

In order to master the movements of the Rings we fear it is necessary to become familiar with being in the position of "upside down." We have known gymnasts who, fairly good on other apparatus, have drawn the line at the Rings for this reason, alleging that they saw "stars" in this particular position. We admit all this; but much can be done to overcome this feeling by practice and perseverance. Commence, then, to practise "Circling over," keeping the legs stiff, and bending from the waist only, go over backwards in the dislocation position, until the feet touch the ground. After a little practice, perform the movement a little quicker, which means a little somersault. Afterwards try the "CUT OVER." In this the impetus should be much greater, the hands should be held closer, and the arms bent. It is best to practise the position for some time before leaving go with your hands, bringing up the legs and pressing the thighs smartly against the fore-arms (see Fig. 2). A few trials at this will enable you to attempt the "Cut over" with confidence; although, as we have seen some nasty spills over attempting even this simple movement, we strongly advise obtaining the help of an assistant in helping you over. When you can safely manage the "Cut over" you may attempt it in hollow-back position. This will be found more difficult; but as it looks so much better than the ordinary way, we advise a trial at it. The method to be pursued is to press the thighs against the wrists with great impetus, retaining the hollow-back position.

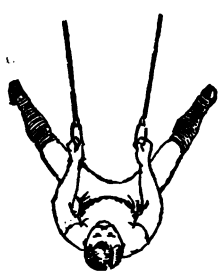


Fig. 2.

RINGS.

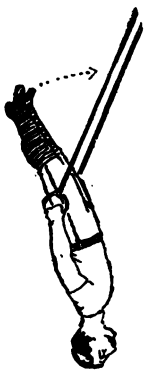


Fig. 3.

The "DISLOCATION," which consists of a similar movement to "Circling over," performed quickly, and without leaving loose with the hands, should be first practised without a swing. Most of us have had some difficulty with the "Dislocation;" but if you keep *the arms* bent these will vanish. When practising with a swing it is best to lift up your legs from the waist, keeping them stiff at the front swing, and retaining this position until nearly at the end of the back swing (see Fig. 5). Then shoot the legs over the head, and at the same time reverse the position of body (see Fig. 4). If good time is kept in this exercise it will have the effect of gradually increasing the swing. The "Dislocation" can also be reversed to "forwards." In this, instead of the feet passing over the head, the head goes forward through the ropes—arms, as usual, to be kept bent. The most effective way, however, of showing off the "Dislocation" is to perform it in hollow-back position, commencing as in Fig. 3, and passing through as in Fig. 4. This requires a good muscular effort, in the first place, to press up into the position of Fig. 3, and afterwards some control to retain the balance until the end of the swing is reached. The "TREBLE DISLOCATION" is to perform consecutively a dislocation at the front, centre, and back of the swing, requiring good judgment in going through the ropes at the proper time. The "FORWARD DISLOCATION" consists of going through the ropes head first, with *bent* arms. This movement can be alternated with the others.

Fig. 4.

RINGS.

Fig. 5.

The "CUT AND CATCH" is generally remembered by most gymnasts, if only for the "sit downs" occurring in the early attempts. Oft have we seen the ambitious ones attempt this feat, with the idea that pluck was only necessary, and oft have we seen them make a perpendicular descent from position of Fig. 6, retaining that undignified position until stopped by hard boards. The moral of this, then, is to have a mattrass and an assistant at the right place. COMMENCE by taking a short swing, and when at the back lift up the legs (see Fig. 5), and just on the return swing bring down the legs quickly upon the wrists (see Fig. 6). The legs should be brought down with sufficient force to bring the head between the Rings. When this point is reached, loose the Rings with the hands (see Fig. 7), and before the feet touch the ground catch the Rings again with the hands. This movement can also be done at the forward swing; also at the forward and backward ends in a swing, standing, and from various combinations, such as the "SWINGING RISE and CUT AND CATCH." In this movement you rise to rest at the back swing, and suddenly going through the ropes head first, and with bent arms, you simultaneously open your legs and perform the "Cut and Catch." This can also be done at the *front* swing, but it is very difficult.

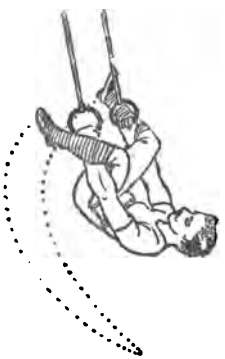


Fig. 6.

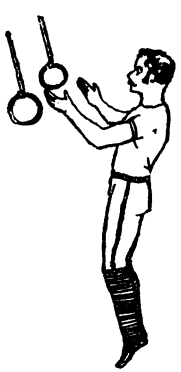


Fig. 7.

RINGS.

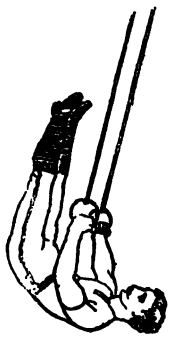


Fig. 8.

"CIRCLING INTO REST" is a very good method of mounting above the Rings. It should first be learnt without a swing, since several developments can be made into other exercises from the movement. When learning it a good hold of the Rings should be obtained by getting that part of the wrist close to the small finger well on (see Fig. 8). This will give you more command and leverage in this as in other strength movements. Now raise the body between the ropes until the arms are well bent at the elbows. *Keeping the arms* in *this* position, bring the head back, and press downwards with the hands. This will bring you into the rest above the Rings (see Fig. 9). In attempting it with a swing it is best to learn it with a small swing first, and the circle into rest should be done just before you get to the end of the swing, backwards or forwards. Stiff knees must be kept in attempting this exercise. It looks very well to perform one at each end of the swing. D. Templeton and A. Dodd, of the Liverpool Gymnasium, were rather famous in performing this feat in a very easy and graceful manner. It can also be supplemented by a series of "CONTINUOUS CIRCLES INTO REST." This should be tried without a swing at first, taking care to keep the wrists well over, and bending from the waist with the legs stiff. In this way follow out the directions already given for circling into rest, doing about six without stopping. You can then finish by a "Cut off." In doing them swinging, endeavour to do so quietly, without stopping your swing.

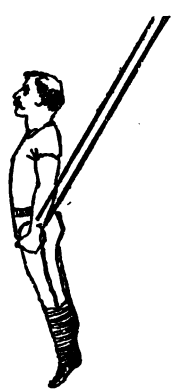


Fig. 9.

RINGS.

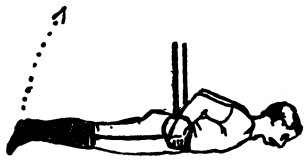


Fig. 10.

The "PLANCHE ABOVE RINGS" is a development of the "Circle into Rest," for in performing the latter slowly you have only to lean forward with the head and shoulders, stiffen the legs out behind you, and keep the hands at the hips (see Fig. 10), and the feat is done.

Fig. 11

A further development of the movement is to press into the "HALF-ARM BALANCE." To do this the back must be hollowed, and putting more pressure on with the hands, bring the feet upwards in the direction indicated by the dotted line in Fig. 10. When the legs get up a little, bring the backs of the hands to the front, the elbows out to the sides, and pressing against the ropes, bring the legs up into the perpendicular (see Fig. 11). The elbows should be, however, *outside* the ropes. If you are strong enough in the *extensor* muscles of the arms you will be able to push up into the "FULL-ARM BALANCE" (see Fig. 12). The arms should rest against the rope, and, in learning, the feet also. It is not however very good form to place the feet against the ropes. This feat can also be accomplished in one movement by means of a quick circle into rest and push up; but we will treat of this again. Endeavour to put as much style as possible into these movements. By doing so you will find it more easy to accomplish. This remark will apply to all gymnastic exercises. We have often seen pupils attempting an ordinary feat in gymnastics, and become disheartened at not immediately succeeding in executing it. The reason in most cases will be found in their bent knees, thus throwing them off their balance, and putting them into a difficult and awkward position.

Fig. 12.

RINGS.

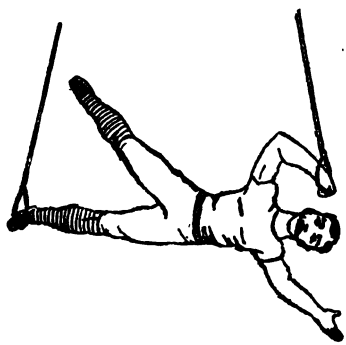


Fig. 13.

The "FOOT AND HAND RISE" is a stiff bit of work, and it is little use attempting it unless you have well-developed *biceps* as it requires a great amount of strength to practise it successfully. STAND under one ring, which catch with the right hand; spring now quickly from the ground, and place the left instep in the other ring. Getting the wrist well on, pull up to half-arm with the right hand. Now straighten the body and legs, keeping the right leg well above the left (see Fig. 13). It is at this point that your strength will be tested, for, bringing the right hand closer to the chest, and the right leg forward and downwards, it requires a great effort to prevent entire collapse. If, however, you keep firm at the right hand, and use the right leg as a lever, you will rise up above the Rings (see Fig. 14). It will, however, require an additional hard push to get your right arm straight. Here it will be necessary to extend the left hand forward, and drop the right leg a little, in order to preserve the balance and add a little grace. A nice change and finish to the feat is to go into the "FOOT AND HAND CIRCLE." To do this you place the left hand on the same ring at the front of the right hand. Now lower your body below the Rings, keeping the left toe pointed downwards, and using the right leg as a lever, revolve horizontally from the right side, taking care to keep the hands close to the chest.

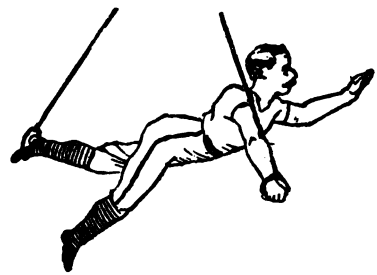


Fig. 14.

RINGS.

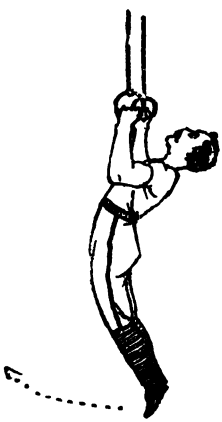


Fig. 15.

We have frequently urged the necessity of "graceful gymnastics" in preference to anything of an intricate or difficult nature; and we are sure our readers will be of a similar opinion. We therefore advise all gymnasts to practise the "HOLLOW-BACK CIRCLE." To hollow the back you simply have to bend slightly backwards from the waist, keeping the legs straight, the toes pointed, and the head well back. HANG therefore by the hands from the Rings, and keeping in this position, endeavour to "circle over." It is best to start from straight arms, and then bend the elbows (see Fig. 15). There will be a great inclination to bend forward from the waist here, but this must be resisted, and your efforts directed to bringing the hands down to the hips. This ought to bring you over, as in Fig. 16. Your work, however, is not quite finished, for more effort is required to bring the body right over until your feet are near to the ground, when you loose hold of the Rings and drop upon your feet. The practice of this movement will be of considerable assistance to you in learning gymnastics, for the simple reason that it is the most graceful position to assume, therefore the easiest. If you feel disposed to retain your hold of the Rings in the dislocation position, it will enable you to try your strength in getting back again in the same position, or perform the back and front "Planches" *en route*, afterwards finishing with a "Cut off." Advanced gymnasts might vary by performing these exercises by the aid of one finger only on each ring.

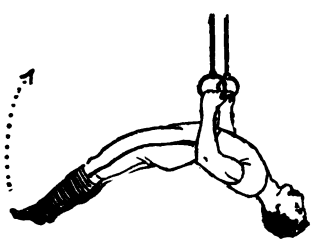


Fig. 16.

RINGS.

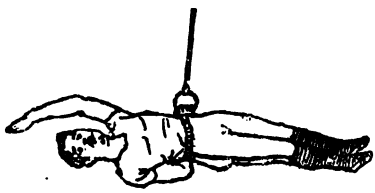


Fig. 17.

We have already said something about "Planches" in the Horizontal Bar chapter; and as it seems to be the ambition of most gymnasts to excel in them, we propose to say something more about them here. It is a safe rule, with rare exceptions, that the shorter the gymnast the better the "Planche;" but here we have a couple of exceptions, and even the long and lanky one will be able to manage the "SIDE PLANCHES OR LEVERS." In getting into this position you should "circle over" (see Fig. 1), until the legs are well down in the dislocation. Then bend the right arm, and bring the body in hollow-back style across the forearm. The waist should rest against the wrist. Be sure and keep the arms bent, or the weight of the body will fall on the shoulders, and be painful. When you have got the body in a perfectly horizontal position, loose the other ring with the left hand, and place it over the head. This will assist in balancing the body (see Fig. 17). The "SIDE PLANCHE FORWARD" is performed by catching hold of the rope of the right hand ring with the left hand. Now bring the upper part of the body over and past the right hand, and when the waist is opposite the forearm, lean your weight upon it, putting the left arm, as usual, over the head (see Fig. 18). You will find a great inclination to double-up rather ungracefully in this exercise, and you might with advantage bend a little; but too much bend spoils the feat, and should be resisted. Finally, the principal cause of failure in attempting the "Side Planches" is neglecting to place the arms at the centre of gravity, so that the weight is evenly balanced, and be careful to keep the arms *bent*.

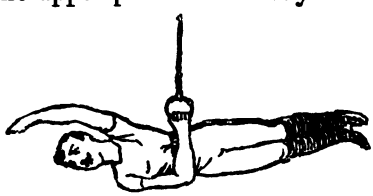


Fig. 18.

RINGS.

Fig. 19.

To roll into the "ONE-ARM PLANCHE" requires an amount of strength and perseverance in practice that almost disappoints one. COMMENCE by hanging on one ring with the right hand, then pull up to half arm (see Fig. 19), and with a sudden movement bring the right shoulder forward, and at the same time stiffen out the body horizontally, bringing the left hand to the front (see Fig. 20). Another method is to "circle over" from the position of Fig. 19, and when both legs are past the right hand, and the waist close to the hand, shoot out the legs quickly behind into a horizontal position (see Fig. 20). The author first saw this feat performed by a French *girl*, a Mademoiselle Nathalie, in 1865, and only upon one other occasion since. Determined to practise it up, we found it so difficult that some years elapsed before we could manage it. We then made further experiments, until we were able to get into the position holding a bar-bell weighing 120 lbs. in the left hand, and finally succeeded in getting into the "One-arm Planche" with the aid of *one finger only*. Some scepticism has been shown about this, but the author holds several gold medals from the Irish Champion Athletic and other athletic societies for the feat; he also performed it before the Right Hon. W. E. Gladstone, M.P. and family, at Hawarden, on January 1st, 1887, and before Colonel Onslow, Sergeant-Major Noakes, and gymnastic staff, at Aldershot, in May 1887. We quite admit there is little usefulness in extreme feats of this sort, but perhaps it may be considered extraordinary that the entire weight of the body can be held in this position by the sole aid of so slight a joint as one finger.

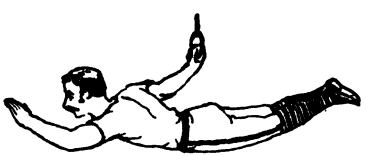


Fig. 20.

RINGS.

Fig. 21.

"THE FULL-ARM BALANCE SWINGING."—We have already referred to the Full-arm Balance standing. We will now have something to say upon it swinging, and whoever has been fortunate enough to see G. W. Renshaw, of the Sydney Gymnasium, circle into the balance at each end of the swing, will remember the treat. Edward Alexander, of the Liverpool Gymnasium, also performs this feat in very good style, and very effective it looks. BEFORE attempting this movement, it is necessary that you should be well up in the exercises of Figs. 10, 11, and 12. You can then take a little swing, and when at the back, throw the legs up behind, at the same time pressing up in hollow-back style until the balance is reached. The tendency to overturn should be counteracted by leaning the arms against the ropes (see Figs. 21 and 22), the backs of the hands should however be to the front. To circle into the balance you must first perform the circle into rest. Do not allow your legs to come down, but by a quick movement of the legs shoot further upwards, high up between the ropes; this, assisted by a good pull with the arms, will bring you into position of Fig. 11; a good push up will take you up to the "Full-arm Balance." All this must be done rapidly, and before the end of each swing. If any difficulty is found in acquiring this feat, we advise learning the SHORT-ARM BALANCE SWINGING. This will be found much easier, and consists of swinging in the rest, and pressing at the front or back swing into the short-arm balance (see Fig. 11), keeping the head well back, the body arched, and back of the hands to the front.

Fig. 22.

RINGS.

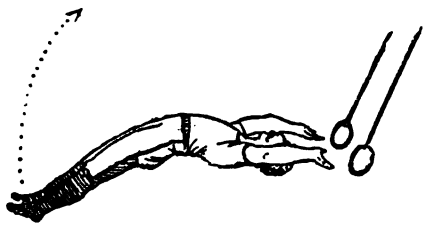


Fig. 22.

To learn the "BACK-AWAY" it is best to practise the hollow-back position necessary for it at the end of the front swing. Before you attempt to loose with the hands, this position must be accompanied with sufficient impetus to turn the body around on to the feet, and as the swing of the Rings is not always sufficient for this purpose, it is best to supplement it with a swing or beat of the body also. To get this, COMMENCE, when on the return from the back swing, to bring the legs up in front, keeping them stiff, and allowing them to fall loosely back again. Again bring the legs forward, but this time in the hollow-back position necessary for the "Back-away" (see Fig. 23). A few practices at this movement will give you the necessary impetus to turn. Of course you must provide mattrasses and obtain assistance in this and all other cases where there is any risk. For "THE FORWARD-AWAY" the directions should be reversed—*i.e.*, a beat or swing of the body is necessary to obtain the requisite impetus to turn the body on to the feet, but it must be commenced on the return from the *front* swing. The body in its second beat will come up as in Fig. 24, at the end of the back swing, when it may be attempted with the usual precautions. If the ropes are of convenient length to give you a quick impetus, you can retain the hollow-back position while turning; but if you have not got this advantage it will be found necessary, after leaving go, to double-up from the waist.

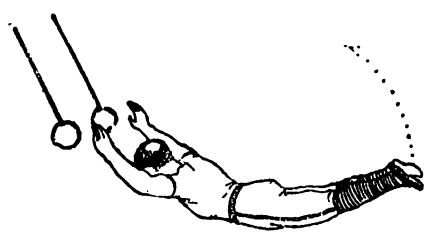


Fig. 24.

RINGS.

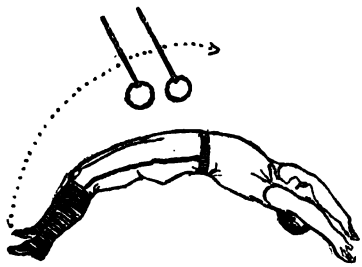


Fig. 25.

"A BACKWARD BACK" is a "*Back* Somersault" at the *back* end of the swing. As in the preceding somersaults, it requires a beat or swing movement of the body to give the necessary impetus to carry the body over backwards on to the feet. TAKE a swing about 10 feet high from the floor, and when at the front hold the legs forward, keeping them stiff from the waist. When half way on the return from the front swing to the centre, bring the legs backwards, bending from the waist only; the return swing of the *body* will put you into the correct position for your somersault (see Fig. 25).

The "FRONT FORWARD" recalls some early experiences to the author, who therefore advises an extra mattrass. TAKE a similar swing to the preceding movement, and when half way on the return between the back swing and the centre, lift up the legs in front, keeping them stiff, and bending from the waist only. Just before the end of the forward swing is reached, bring the legs down again and backwards until the hollow-back position is reached. When the legs are as far back as possible, loose the Rings (see Fig. 26), and endeavour to catch your ankles with your hands, doubling up your body to do so. This gives the requisite turn to the body to bring you on to your feet. Both of these somersaults, though not considered very difficult *when* you are able to do it, require great caution in learning; and we strongly advise a plentiful supply of mattrasses, and indeed to be "lunged" as well, for it is by far the quickest way of learning, and may prevent an awkward spill.

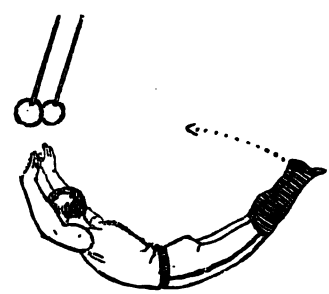


Fig. 26.

RINGS.

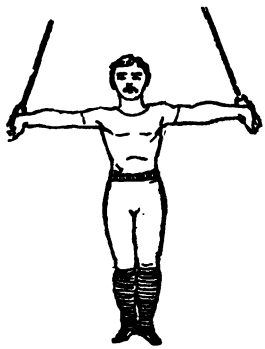


Fig. 27.

We will finish our Ring exercises by attempting the "IRON ARM.' Few feats look so well as it does, it appears so thoroughly a test of physical strength; and we need scarcely remind any advanced gymnast that it does require a great deal of strength, and no little skill either, to perform this feat properly. We have seen men with immense strength fail time after time with this movement, sometimes damaging their collar-bone. On the other hand, we have seen others not possessed of so much strength perform it in very good style. Each member of the "Champion Eight" of the Liverpool Gymnasium, in 1889, performed it with comparative ease—an average of ability that would not be easy to equal. What, then, is the proper method of practising it? *Our* experience is that men do not place the work upon the superior muscles, but generally bring the arms out slightly backwards, putting the weight upon the *extensor* and *tricep* muscles. *Reverse* this action, therefore, and bringing the arms slightly to the front, put the *bicep* muscles into play; and when you can perform the "Iron Arms" fairly well, a little continued practice will enable you to do it on either set of muscles.

THE TRAPEZE.

There was a time when the "Trapeze" constituted the almost universal definition of gymnastics, and *vice versa*, the result being that all accidents resulting from practising the former were laid wholesale at the door of the latter. Technically, no doubt, it was right, for the Trapeze *is* a gymnastic apparatus; but then so is every apparatus with which we exercise. The fond *mater* need not therefore expect to see her daughter repeat at the gymnasium what she has seen a Leotard perform at the Crystal Palace; and Mrs. Brown is not quite justified in speaking of them dreadful "jimmynastics" when she hears of some unfortunate acrobat falling off the Trapeze. Used properly, and in the simplest way, the Trapeze is of great assistance in counteracting spinal curvature, and many a child would have been spared much pain in after years if the Trapeze had been judiciously used when the curvature gave signs of its growth. Still, the Trapeze has much to answer for. We know of at least one training school that closed its gymnasium, with its many benefits, through an accident that occurred upon the "Trapeze." With this view in mind, we will not describe much of the "dangerous element," but sufficient, we hope, to make it interesting, and sufficient to enable the gymnast to control his body upon this oscillating and uncertain apparatus.

THE TRAPEZE.

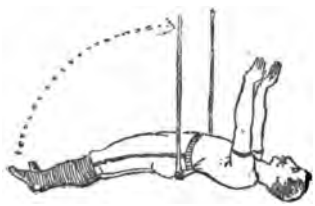


Fig. 1.

Several exercises can be performed from the position of "BALANCING UPON THE BACK," but a good, quick, and proper balance is first necessary. The common fault is to lay limp on the bar, bending too much from the back, and allowing the legs to bend. This causes loss of control over your actions. Find out, therefore, the best place to balance upon the bar, and most people find this at the bottom of the spine. When this is arranged, stiffen the body, hold the hands over the face, and *look at your toes.* A simple exercise, but one that looks effective is to slip from the "BACK TO THE HOCKS," allowing the jerk which the hocks obtain to bring you on to your feet. Then there is the "LONG DROP"—*i.e.*, falling back head first, and as you do so, *open* your legs *wide* and turn out your toes, the effect of this being to catch the ropes close to the hooks—good movement for torn stockings and bruised insteps. A much more difficult feat is the "ROLL OFF BALANCE," as in Fig. 1. As the dotted line indicates, bend the legs forward from the waist over the head and on to the feet. Just before your legs reach the ropes, bring the legs over the head very quickly; indeed, you must obtain the impetus that gives you the necessary turn before the Trapeze slips away out of the perpendicular hanging position. Have also an assistant to keep his hand upon your shoulder, for fear you do not reach *terra firma* safely. The "Reverse Hand-grind" looks very neat from the balancing position on the back. From this position you allow your head and shoulders to fall backwards, and as you are in the act of slipping off, you slip your hands around to the front of the Trapeze bar, and getting your wrists well on, you make a strong pull to the bar, bringing up your back against it, repeating with a balance between.

THE TRAPEZE.

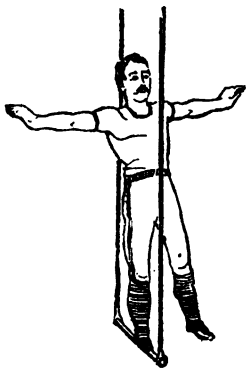


Fig. 2.

Balancing feats look well on the Trapeze (which, by the way, should be heavy, and the ropes short); and in this particular department we never saw any amateur to shine with such advantage as R. Baxter, of the Hull Gymnastic Society, who not only performed the feats here—which are all we can spare space to describe—but very many more, including balancing upon a ladder, chair, and, if we mistake not, attired himself in evening dress upon it. To "BALANCE UPON ONE FOOT" (see Fig. 2) is not very difficult. Look at the rope opposite the face, keep the arms outwards and stiff, to serve the purpose of a balancing pole. If the left leg is kept stiff it will also assist in keeping the balance. This movement can also be done swinging, and a very graceful exercise it looks. It is obtained by a slight forward and backward movement of the left leg. This gives an oscillating motion, which can be directed and controlled by the leg, and as suddenly stopped by a reverse or counteracting movement.

Fig. 3.

The "FORWARD BALANCE" is much more difficult. STAND on the toes, and in getting into position hold the ropes at each side opposite the waist. This is the readiest way of recovering yourself if you should lose your balance, which you are very likely to do in learning; bend the knees slightly, and keep the arms out in front of the chest (see Fig. 3) as a balancing medium. If these two feats are learnt, others will not be found so difficult, and eventually swinging exercises may be attempted in various directions; but in this be content with very little at first.

THE TRAPEZE.

Fig. 4.

It has often been said that the most difficult feats *look* the simplest, and *vice versa*. This is especially true of the "SHIFTING UPSTART," which is one of the most scientific—if such a term may be used—on the steady Trapeze. The object is to get up backwards from position of Fig. 4 to that of Fig. 5. Many, no doubt, will say, "easy enough," and proceed to pull the back over the bar in the ordinary way, sliding over until they arrive in position of Fig. 5; but that *is not* our object. HANG therefore with the hands, ordinary grasp, and lift up the legs slowly until the soles of the feet are underneath the bar. Now, by a sudden shoot of the feet backwards and upwards, take the weight of the body momentarily off the arms, and, taking advantage of this relief, by a quick shifting movement of the hands, bring the arms up to the front of the bar. By this time the legs will again have dropped; but if you are quick enough, you will have arrived in position of Fig. 5, and the feat accomplished. It is good practice to try this movement on the Horizontal Bar with hands reversed, where it will be found much easier, and also upon the Trapeze with hands reversed. This, however, is considerably easier than the feat under notice. When the feat is accomplished, push up into the sitting position, from where you may attempt the "JERK OFF THE LEGS" by catching hold of the ropes and sinking into the hocks. Now, leaving go with the hands, the weight of the body (which must be kept in hollow-back position) gives a jerk upon the hocks that will bring you upon your feet.

Fig. 5.

THE TRAPEZE.

Fig. 6.

The "HANDS-BALANCE" upon the Trapeze is one of the most difficult balances we know of, unless perhaps we except the Hands-balance on the *swinging* Parallel Bars. One peculiarity of it is that it cannot be attempted with any hope of success unless it is in *good* form—viz.: by rising up with stiff knees from the waist, or pressing up in the "hollow-back" position, the head well back, and the arms slightly bent (see Fig. 6); and even then it will take considerable practice, with great strength in the arms, before the feat can safely be accomplished. One of the best methods to assist in learning it is to acquire some method of saving yourself when losing the balance. This can be done by turning sideways, as off the Bar or Parallel Bars, or by the general and rather ignominious method of collapsing in a lump manner. Our own favourite plan was to finish with the "HAND-SPRING." IN this a very firm hold of the Trapeze with the hands must be kept, and although the bar will swing slightly backwards, this hold must be persevered with until later than usual (see Fig. 7). A fall or two may be expected, so take the usual precautions. When these movements are thoroughly mastered, you might attempt the "PRESS INTO BALANCE" combination, viz.: get a good grasp of the Trapeze with wrists on, perform a strength rise until above the bar at the rest. Now lean forward into a top *planche*, and as the feet rise, push up into the Hands-balance. If you fall over, finish with the "Hand-spring;" but if you retain it, lower down again into the top *planche*, and from that into the front *planche* under the bar.

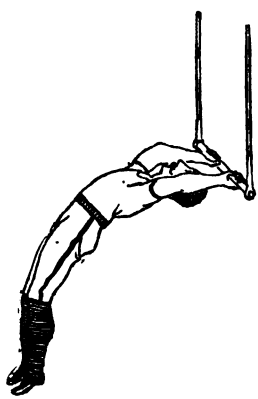


Fig. 7.

THE TRAPEZE.

Fig. 8.

We should like to have said something about the *Flying* Trapeze here, in acknowledgment of the many exhilarating flys *and* croppers that we have experienced in its practice; but discretion prevails, for we have seen so many accidents occur to beginners, who, emulated perhaps by seeing J. M. Hubbard, of the Birmingham Gymnasium, or some other crack, perform the various flys with *apparent* ease, go the next day, and fancying it a matter of pluck only, attempt, and then the ambulance *corps* is required. We will therefore simply describe a few somersaults, and leave the *Flying* Trapeze to the discretion of the pupil. The "BACK-AWAY" of the Trapeze—see Fig. 8—is very similar to that off the Rings, the position of the body (hollow-back) *must*, however, be observed until the feet almost touch the floor; if not, they will catch the Bar, and it may be unpleasant. The "FORWARD-AWAY"—see Fig. 9—although the directions are the same, will be found more difficult than the same movement upon the Rings, the Bar being slightly in the way of obtaining sufficient impetus. Perseverance will, however, enable this difficulty to be overcome.

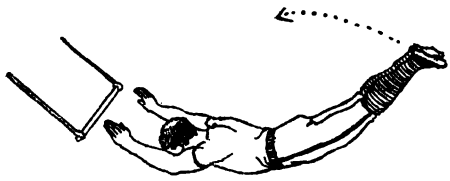


Fig. 9.

In the meantime, be in no hurry to leave go your hold of the Trapeze Bar until you have had plenty of practice in mastering the correct positions. You might then vary by performing a few swinging rises at the back and front swing before you finish with your somersault. Do not, however, fatigue yourself before finishing, as it often leads to disaster.

THE TRAPEZE.

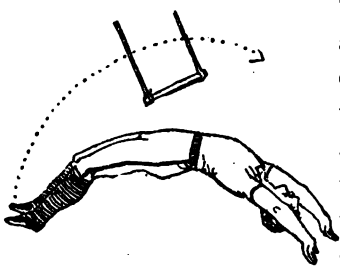


Fig. 10.

The "BACKWARD BACK" of the Trapeze (see Fig. 10) is a very awkward feat to try, for your feet cannot, as in the Rings, pass through the ropes. You will therefore, in addition to the directions given in the Rings for this movement, have to rely upon the accuracy and energy of the final throw for the somersault. Endeavour to be lunged for it, if possible, and, at least, have an extra mattrass and assistants. Once, however, the first or second trial is over, it will not be found very difficult or hard work. The "FRONT FORWARD-AWAY" from the Trapeze presents the same difficulty as the other somersaults, viz.: the bar preventing the legs being raised high enough to obtain the necessary impetus. This will have to be counteracted by a good backward swing when at the front. If this, in addition to observing the directions given for the same movement on the Rings, is done, the "Front Forward-away" will be accomplished; for although it is a more difficult feat than the preceding somersaults, there is less danger attached to it, it being a more natural way of turning than the others. At the same time, take all precautions against falls in these somersaults, and, if you can, choose your length of rope. For the Trapeze we would recommend them to be about 9 feet long, as giving a lift or impetus for your turns. It is very hard work to throw somersaults with long lengths of rope, the movement being too slow to give the necessary turn. In that case it would have to be counteracted by obtaining beats or swings of the body *en route* to the end of the swing.

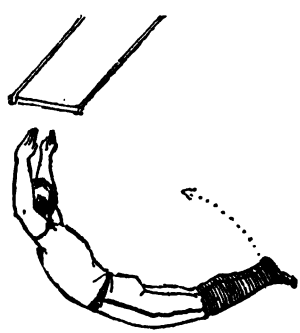


Fig. 11.

THE TABLE.

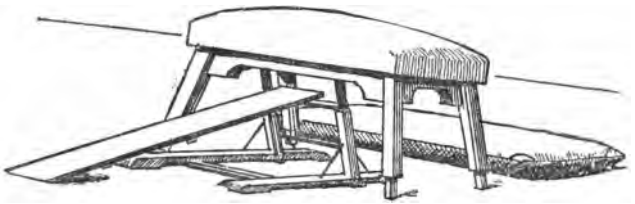


Fig. 1.

We have in our time seen many shaped things and creatures for gymnasts, and lively men to hurl themselves over; from the round, roughly-shaped part of a tree, with a leg at each corner, to the zebra-shaped animal in use at the Military Gymnasia; and when at a loss for apparatus have ourselves borrowed a dining-table, and given with our pupils a very fair display of exercises—unique, at any rate, for a dining-table. Perhaps our best experience in this way was in the summer of 1889, when E. Sully, G. Craig, R. Minter, H. Smith, and E. and A. Alexander, all gymnasium directors, gave an assault-at-arms in aid of the village organ of St. Mawgan, North Cornwall, where we were located for our holidays. We were very hard up for apparatus wherewith to please the primitive critics of that out-of-the-way district. We could think of nothing satisfactory, until one of us suggested that the vaulting horse might suit the taste of our village audience. Much cogitation ended in our taking possession of the schoolmaster's desk, and converting it into our vaulting horse, an ordinary plank elevated serving the place of the spring-board. All the usual work, including somersaults over, astounded the villagers, the school boys especially seeming to revel in the contumacious use to which their pedagogue's rostrum was subjected to; but having performed upon all kinds, we decidedly prefer the "Table" to all others. The simpler exercises are a little more difficult upon it, but the difficult feats are much easier.

THE TABLE.

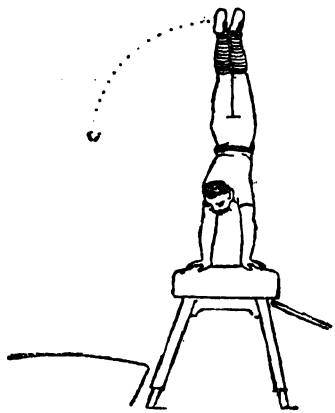


Fig. 2.

"THE SIDE VAULT," performed correctly, is a very graceful movement; and, we may add, performed *in*correctly, a very awkward and ungraceful vault. This is strikingly illustrated at any of our military gymnasia. You see a "Palmer" or any other of the first-rate Staff-Instructors spring into mid-air, and with a graceful bend from the back, descend upon the hands with the arms stiff, and gracefully turn on to the feet—a most pleasing sight to the onlooker. Then comes the recruit, who, with a most fearful run, leaps into space, drops upon the horse with his waist above his feet, and finally collapses in a mixed-up fashion upon the mattrass. The primary cause of this failure is that too much impetus is obtained. A moderate run should only be taken, and striking the spring-board with both feet with sufficient force to invert the body into a perpendicular position. At the same time the body should be turned slightly to the left, the right hand alighting on to the farthest side of the Table, the left to the nearest. The legs and arms should be kept stiff, the toes pointed, and the head kept well back (see Fig. 2). When a squad is practising this exercise it should be gone through slowly, in order to permit each individual vault to be seen to the fullest advantage. After having performed the side vault to the right side, the squad should be put through a similar movement to the left side, and in doing this the left foot should strike the top of the spring-board, the right foot being about the centre, thus reversing the order of placing the feet; the left hand, also, should be placed at the farthest side of the Table.

THE TABLE.

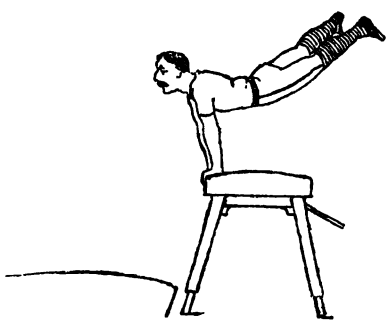


Fig. 3.

The "FROG LEAP" is one of those associations of our school days that is not likely to be soon forgotten, and doubtless many of our readers will remember the varied experience under which it was practised. We remember competing for a prize under rather novel circumstances in this respect. First was placed a boy about 4 feet high with his back to us, and with head slightly bent. Then at a distance of two paces a boy about 4 feet 6 inches in a similar position. Then again a boy of 5 feet high placed in the same position. All of the competitors (boys) managed to get over these in a swing. Then the boys, standing erect, were massed together, the tallest being farthest away, and the competitors were invited to "go over." This resulted in a couple of us clearing, the others being shipwrecked. The boys were then separated again, and a man of 5 feet 6 inches being placed at the end of the row, these also were frog-leaped over by the same pair. In this dilemma, and in order to decide the prize, the services of a sturdy policeman, standing erect with helmet upon his head, were invoked, and placed at the end of the row. Over all these objects the pair successfully, and amid great laughter and applause, frog-leaped, finally being each awarded a prize. IN performing the "Frog Leap" over the Table a moderate run should be taken, strike the spring-board with both feet simultaneously, alighting upon the hands close together at the far side of the Table. The body should be higher than the horizontal position, legs slightly apart (see Fig. 3). From this position a quick push from the hands will bring you on to your feet upon the mattrass.

THE TABLE.

Fig. 4.

The artist has (quite correctly) made the "JUMP THROUGH HANDS" appear a case of premeditated suicide; but the figure is drawn to represent an important position of the exercise, as we will explain shortly. How many we hear exclaim, "I shall never do that; my legs are too long!" and so on; but we have always proved to the possessors of the long legs that their idea was quite fallacious, and at variance with our experience, for, as a matter of fact, the legs or feet do not absolutely pass through the hands, although they appear to do. Commence therefore by taking a moderate run, striking the spring-board below the centre (to prevent overturning) with both feet simultaneously. If a quick run is taken, as in a "rally" by a squad, the spring should be taken off almost at the commencement of the spring-board; the hands should alight at the far side of the Table, about 18 inches apart, the body in the position of Fig. 4, and in the act of overturning. At this point a quick push with the hands will bring the body into a perpendicular position, the feet *following* the hands until they drop upon the mattrass. The "HOLLOW-BACK THROUGH HANDS" is another method of executing this feat, and consists of retaining a hollow-back position during the movement. This will be found rather awkward at first, and it is best, when practising, to go into the position *after* clearing the Table. You may then attempt it while clearing the Table, and finally before doing so. This is a very taking exercise, and looks very well, especially when performed like, and by, the Aldershot Gymnastic Staff, who perform it in rapid succession, some in "hollow-back" style, others doubled up in ball-like fashion.

THE TABLE.

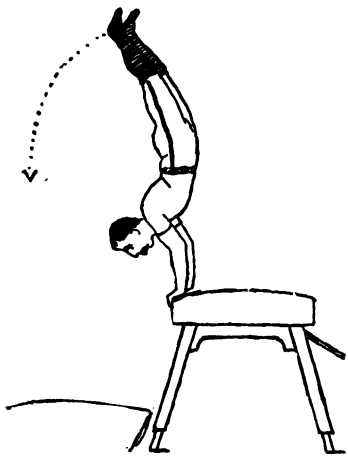


Fig. 5.

Before attempting "THE HAND-SPRING" over the Table, it would be well to learn it correctly from the Parallel Bars, and also from the Horizontal Bar, for nothing looks more awkward looking than to see a squad of gymnasts performing it in bad style, viz.: bent arms and legs, and a general doubling-up from the waist. To perform the "Hand-spring" correctly a quick run is necessary, striking the feet simultaneously a little above the centre of the spring-board, and with sufficient force to enable the body to *descend* upon the Table in hollow-back style, both hands, fingers pointing to the front, alighting at the farther side of the Table (see Fig. 5). When in this position endeavour to keep your hands upon the Table until the body leans over from the waist, and the feet come down upon the mattrass in the direction indicated by the dotted line in Fig. 5. If you have not sufficient pliability in the back to enable you to do this, bend the arms a little, and at the latest moment give a vigorous push. This will not fail to bring you upon your feet. The "Hand-spring" should, like the side-vault, be performed slowly when in squad practice, in order that the graceful effect of each hand-spring may be seen. In this particular exercise we must again award a meed of praise for the excellent manner in which it is performed by the Aldershot Gymnastic Staff; and also, we may say, by Swedish and Swiss gymnasts generally. An advanced manner of performing it is to alight upon the hands, with the body a little higher than the horizontal, and from this position press up into the balance by strength of the arms, and over on to the feet.

THE TABLE.

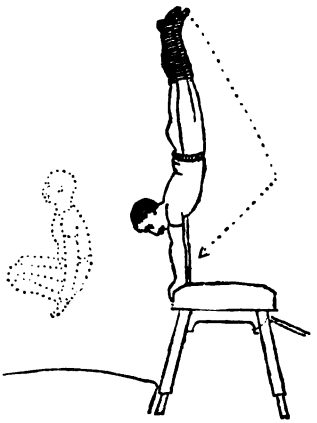


Fig. 6.

"THE BALANCE AND JERK THROUGH" is an exceedingly useful gymnastic movement, whatever apparatus it may be performed upon. The Table is perhaps the easiest of all apparatus for its practice, since, if any croppers are obtained, they are not very severe, and it is an easy position for an assistant to help you. TAKE a short run, and strike the centre of the spring-board simultaneously with both feet, alighting upon the hands, and retaining the "Hands-balance" for a moment (see Fig. 6). When the body inclines to over-balance, as in the "Hand-spring," suddenly bend the arms, and smartly straighten them again, pushing, as it were, the Table downwards and backwards. This will cause the head and shoulders to go upwards, and the legs and feet to come downwards in the direction of the dotted line, and in the position of the dotted figure in Fig. 6. When you are well practised in this, it improves the appearance of the exercise to catch hold of the feet just before you alight upon the mattrass. Another development of this exercise is to "PIROUETTE ON THE HANDS." THIS is done by running as for the preceding exercise, with the difference that, instead of alighting upon the hands at the far side of the Table, you must do so in the centre, and retain the "Hands-balance;" and while in this position, walk around in a "Pirouette" in the centre of the Table. When you have faced the mattrass, finish the movement by walking to the far side of the Table, and jerk from the "Hands-balance" (see Fig. 6) on to your feet, In turning the "Pirouette" endeavour to do so in, as nearly as possible, one spot.

THE TABLE.

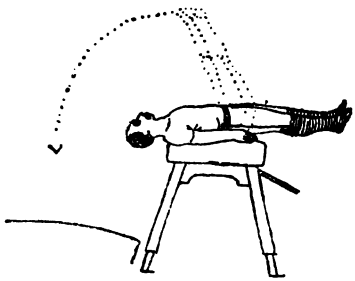


Fig. 7.

"THE ROLL OVER" is not a very difficult feat, but as we have seen croppers in its practice, it is best to go at it carefully until you learn it properly, after which it will be very simple, and requiring very little effort. COMMENCE by walking up the spring-board, and when at the top, turn your back to the Table and sit down, placing your hands at each side of you, retaining a slight hold upon the Table. Now lean back from the waist until you are lying down, with the head and neck just projecting over the far side of the Table (see Fig. 7). When in this position raise the legs upwards, keeping them stiff, and bending from the waist only, until the feet are well over the head (see the dotted figure in Fig. 7). Keeping a slight hold of the Table with the hands, continue the movement of the legs over the head, until the feet alight upon the mattrass, as indicated by the dotted line in Fig. 7. It will of course be necessary to loose the hold with the hands, but not until you find you cannot hold on any longer, and by this time, no doubt, your turn will be safe. We have described the cautious way of doing it; but once having learnt it, it should be performed in a much quicker and smarter fashion, viz.: Take a quick run, strike the spring-board between the centre and bottom, and dive horizontally on the Table upon the chest. When the head is over the far side, turn rapidly round on to the back, and, bending up quickly from the waist, perform the movement. The squad should follow in rapid succession. It can also be performed in pairs simultaneously: in doing this, the pair should strike the spring-board together, one to the right and the other to the left side, each making for the different ends of the Table, afterwards rolling to the centre.

THE TABLE.

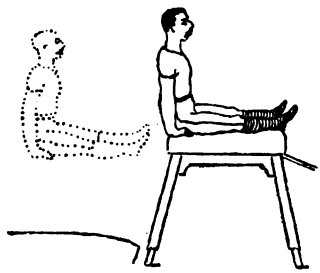


Fig. 8.

"THE EXIT" is one of those exercises which requires coolness and nerve, especially when performed upon the Horizontal Bar or other elevated apparatus. The Table is decidedly the most favourable apparatus to attempt it, being padded, and in close proximity to the mattrass, besides which, an assistant can stand behind and give you a friendly pat on the back. TAKE a short run up the spring-board, striking it near to the top; place the hands upon the Table as in the side-vault, turning the body to sit down at the far side of the Table, legs straight, and a hand at each side (see Fig. 8). Now lean slightly forward from the waist, and, with a vigorous push of the hands, send the body out backwards in a horizontal line with the Table. When the feet have *cleared* the Table (see dotted figure in Fig. 8), lean forward and drop upon the feet. If you find you cannot at first clear the Table with the feet, the assistant should hold you up at the back until you can do so. Most gymnasts make the mistake of trying to get their feet through their hands, and, catching their heels, fall ignominiously on to the mattrass; indeed, from this cause "The Exit" has been productive of great amusement, and always creates fun in a class—a very desirable object occasionally. When you have learnt this movement properly, you can vary it by making it a finish to some minor exercise, such as after the leg twirl. This should be done very rapidly to look effective. Commence by making a short, rapid run, strike the spring-board lightly, for too much spring will upset your equilibrium; and placing both hands at the farther side of the Table, revolve around your hands with your right leg until you come into a sitting position, facing the spring-board, when, without pausing, you should go off in the "Exit."

THE TABLE.

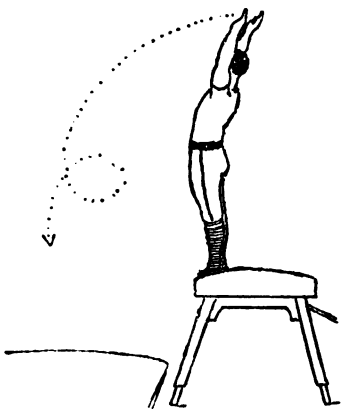


Fig. 9.

"THE FORWARD SOMERSAULT OFF" is not so difficult as it looks; but as it entails a certain amount of risk, we advise that it should first be attempted on the mattrass itself, in order to accustom you to the necessary turn and spring. You will probably not go around further than a sitting position, at any rate, in the first attempts; but this will be sufficient for the purpose in view. WHEN you attempt it upon the level or mattrass, the body should be upright, with the hands above the head, and raising the heels from the ground, a spring should be made from the balls of the feet into the air, and, at the same time, slightly forwards. After the spring has been made, the body should be doubled-up as much as possible. By this time you will probably have arrived at a sitting position; but if more energy is given to the movement, you supplement it by squeezing the body into a small ball-like position as you turn. This is done by catching the ankles with the hands, and, pressing the knees to the chest, you ought with practice to come upon your feet. You can vary this practice by attempting it from one to three feet from the ground, and finally with this experience attempt it from the Table. TAKE a short run, and jump off one foot from the top of the spring-board, alighting at the far side of the Table, allowing the balls of the feet to rest upon the edge of it. Now raise the arms over the head, and as you overbalance forwards, attempt your turn as you have been practising it. *Open your eyes*, in order to see when you should loose hold of your ankles to drop upon your feet. By all means have some assistance in your first attempts.

THE TABLE.

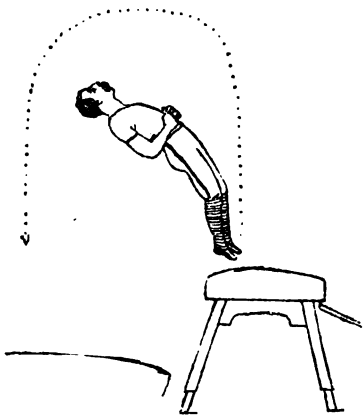


Fig. 10.

"THE BACK SOMERSAULT OFF," although not requiring so much physical effort as the "Forward Somersault," should be attempted with great care, and with every precaution, for, it being an unnatural way of turning the body, there is some risk in its practice. We would therefore advise an experienced assistant to help you. Like the "Forward Somersault," you had also better attempt it upon the mattrass. IN doing so, stand with the feet 2 or 3 inches apart, with the body slightly bent forward from the waist, and the hands down at the sides. Now, with a sudden effort, spring from the balls of the feet upwards and slightly backwards in the air, endeavouring to bring your feet over your head. When this is done, bring your hands smartly under your legs, and try to draw your knees up to your chest. The assistant will supply, by a helping hand, the insufficient and necessary turn. You can supplement this practice by attempting it from a varying height of up to 4 feet. With assistance as before, and as this is much easier, you ought soon to be able to master it and finally attempt it from the Table. Stand at the edge of the far side of the Table, with the heels projecting over, and the hands hanging down by the sides. As you overbalance backwards, spring into the air, throwing the head well back, and keeping the body hollow-backed (see Fig. 10). The impetus thus given to the body should be supplemented by bringing the arms well over the head. The feet ought to turn in the direction indicated by the dotted line (see Fig. 10). It can also be performed in a doubled-up position, but the way we have described looks best.

THE TABLE.

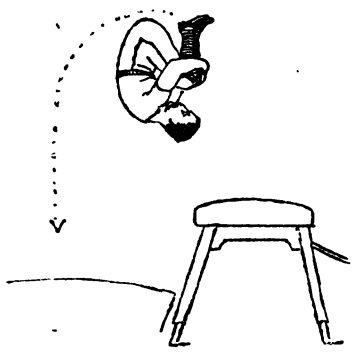


Fig. 11.

"THE FORWARD SOMERSAULT OVER" is the climax to the exercises performed over the Table in this position, and what looks smarter or more enlivening than to see a rally of "Forwards over" by a good squad? Let us therefore learn it well, so that we may participate in the pleasure also, for, to anyone who can manage it in good style, the "Forward over" *is* a great pleasure. It should first be attempted from the spring-board alone, without any obstacle being in the way. TAKE a short run, striking the spring-board a little above the centre, with one foot slightly in advance of the other; place your hands upon the mattrass for a few trials, and simply turn in the "Hand-spring," then put a little more impetus in your run, and spring until you can clear your head, and come perhaps in a sitting position. Now attempt the somersault proper. Take a rapid run, striking the spring-board as before, and with the arms give a good lift into the air over the mattrass. When you get as high as you can, suddenly double-up the body from the waist and catch hold of your ankles, pressing the knees to the chest. *Open your eyes* soon, to see if you have turned sufficiently. When you can leave go your hold with the hands, straighten the body, and drop upon your feet. To perform the "Forward" over the Table will require increased impetus in your run, and more energy in your spring. Be careful, by the way, to *keep your knees stiff*. Many failures result from non-observance of this rule, and endeavour to spring over the Table *before you turn* (see Fig. 11). When you have mastered the Forward fairly well, you can attempt it after a dive over the Table.

THE TABLE.

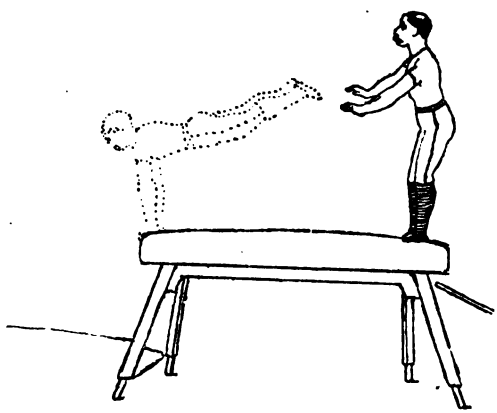


Fig. 12.

After a good rally of the last exercise, we turn the Table length-ways, and show what can be done upon it in this position, commencing with the simpler exercises first, and gradually increasing them in difficulty. One of the easiest is "THE SHORT FLY THROUGH HANDS." This consists of taking a quick run, striking the spring-board near to the commencement of it, placing the hands upon the near end of the Table, and, with a quick spring, alighting upon the feet (see Fig. 12). From here, without pausing, you fly, hands first, and alight upon the far end of the Table, the body being kept straight (see dotted figure in Fig. 12). From here again, without any stop, you give a smart push with the hands, which will have the effect of sending the body upwards, the feet passing over the end of the Table on to the mattrass. This exercise should be performed by a squad very rapidly, following after each other in quick succession. After this has been mastered satisfactorily, you might attempt "THE SHORT FROG LEAP." This is done pretty much the same as the last exercise, with the exception that when you are in the standing position at the near end of the Table, you fly on to the hands at the far side with the hands close together, and opening the legs wide, you give the same quick push with the hands, which will bring you safely over in Frog Leap style. This exercise also ought to be executed in quick order: a rally of either of these simple movements is good practice, and looks well.

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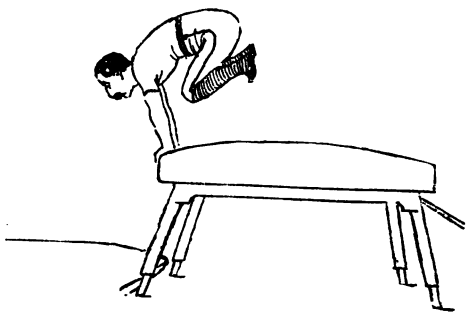

Fig. 13.

The short flies that we have described must now develop into long ones, and the "LONG FLY THROUGH HANDS" will require plenty of spring and agility. We have remarked before that many gymnasts have a strong idea that they will never be able to execute the above feat on account of the length of their legs, and we must again remind them that their feet do not actually pass through their hands, but *after* them—see Fig. 13. Their length of legs, therefore, ought to be an advantage to them. It is best to practise by taking a short run, striking the spring-board near to the top, and placing your hands upon the table, push up on to your feet as in the first movement of Fig. 12; and as the impetus of the run is increased, so should the hands be placed farther away, until finally you have sufficient confidence to attempt the full distance, and in doing this a rapid run will be required, and the hands should alight at the extreme end of the Table. "THE LONG JUMP" may now be tried, and very well it looks, especially if done in rapid succession by a good class. It is best to attempt this gradually, and we advise at first a moderate run, striking the feet upon the spring-board near to the top, and jumping, say, to the centre of the Table, increasing the jump until finally the jump over the entire length may be attempted. Just before alighting upon the mattrass, the gymnast should endeavour to assume a hollow-back position.

THE TABLE.

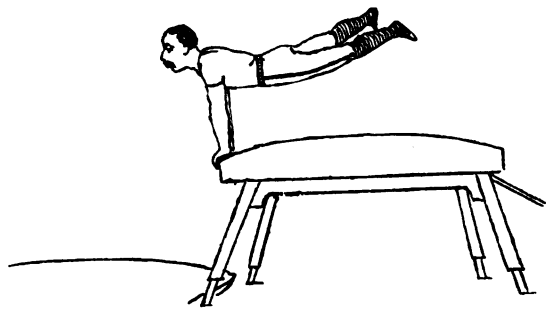

Fig. 14.

"THE LONG FLY" over the Table is no joke. We once set this exercise for the first time at the National Training College for Schoolmasters in Dublin, over a rather elongated home-made horse; and noticing that the class did not respond as usual, although never wanting in pluck, I enquired the reason, whereupon one of them came forward as a delegate and said: "The *boys* considered it *too long* a journey." And so we fear the "Long Fly" will be considered by many, for, along with the length, there is the *width* to get over. COMMENCE by taking a rapid run, striking the feet close to the top of the spring-board, fly with the hands first, the body following in a horizontal position. The hands should alight at the extreme end of the Table; give a quick push with them, and at the same time extend the legs outwards (see Fig. 14), dropping upon your feet on to the mattrass. A little determined practice will enable you to do this successfully. "THE REVERSE LONG FLY" is even more formidable than the last exercise. COMMENCE, as usual, with a rapid run, striking the spring-board as before, close to the top, fly hands first, body horizontal, alight upon the hands at the extreme end of the Table with the arms *slightly bent*. When giving the push with the hands, suddenly twist the body from the waist, facing the spring-board; at the same time extend the legs outwards, and dropping upon the feet on to the mattrass *facing* the Table.

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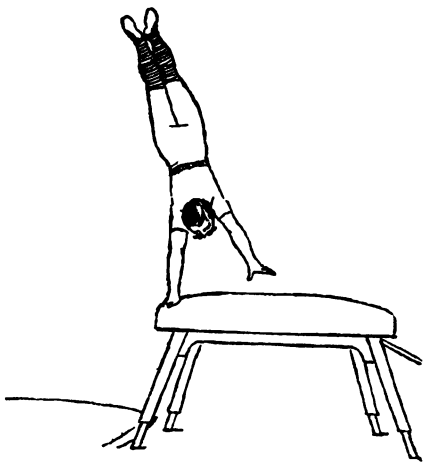

Fig. 15.

"THE SIDE WHEEL" gives a good opportunity for the exhibition of graceful effort, especially if a class can be trained to perform it. Before attempting it, it is very necessary that you should be well up in the "Side Vault" (see Fig. 2), the movement being very similar; but as you have now more space to travel in your vault, it is of course more difficult. TAKE then, a rapid run, striking the spring-board close to the top, with the right foot slightly in advance of the left, spring into the air, and, inverting the body, drop upon first the left hand in the centre of the Table, and almost simultaneously, the right hand at the extreme end. When in this "Hands-balance" position, continue the movement by putting the weight of the body on to the right hand, and, raising the left hand (see Fig. 15), allow the body to fall over sideways on to the feet. "THE ROUND ALL" is a repetition of the "Side Wheel;" but when you arrive at the position of Fig. 15, you bend backwards from the waist, and, allowing the body to fall over, keeping the right arm stiff, you turn in semi-handspring fashion on to your feet upon and facing the mattrass. "THE ROUND ALL ON" is also a repetition of the last feat. You must alight upon your feet *on the Table.* In attempting this the left hand must be placed upon the near end, and the right just before the centre. A quick push from the hands, and a quick twist of the body to the left side, will bring you standing upon the Table.

THE TABLE.

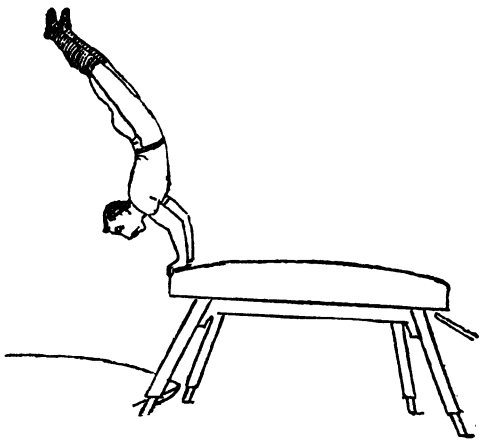

Fig. 16.

"THE HAND-SPRING LENGTHWAYS" is a dashing looking exercise if performed in good style. You must take a rapid run, striking the spring-board close to the top, and alighting as in the "Long Fly," upon the hands at the far end of the Table (see Fig. 14). The arms, however, must be slightly bent, and the body elevated into the perpendicular position (see Fig. 16). Press over from this position into the "Hand-spring," as directed in Fig. 5. This feat can be pleasantly varied by the "HANDS-BALANCE WALK AND HAND-SPRING." In doing this you strike the spring-board just above the centre with both feet together, springing into the air, and, inverting the body, drop upon both hands in the "Hands-balance" at the near end of the Table. Having secured your balance from here, you walk steadily, with *short* strides if possible, to the far end, and "Hand-spring" off as in Fig. 16. This looks exceedingly well if you can get a class to do it alternately. "THE HANDS-BALANCE JUMP AND HAND-SPRING" is similar to the last movement; but instead of walking upon the hands, you *jump* with them, both hands moving forwards simultaneously in little jumps, finishing at the far end, as usual, with the "Hand-spring." The jumping with the hands will be found very difficult; but many gymnasts make it more difficult by bending their arms at the elbows too much. The jumping movement should be made as much as possible from the wrists.

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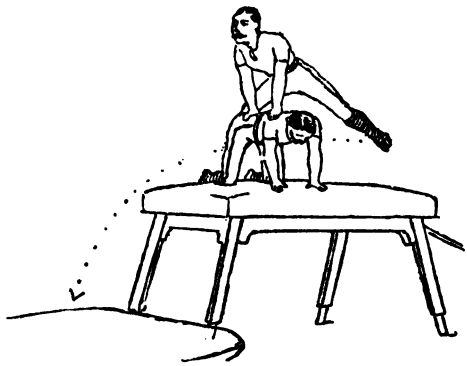

Fig. 17.

The "FROG LEAP OVER MAN UP" is a development of the "Long Fly," and consists of taking a rapid run, striking the spring-board close to the top with both feet together, springing with the hands upon the "Man up," and extending the legs widely apart, clearing the Table, and dropping on the feet on to the mattrass. The feat is no easy one, and we had better attempt it, in the first place, as follows: Place the man up a couple of feet from the near side of the Table, and with a moderate run strike the spring-board as before, performing the "Frog Leap" over the "Man up," and dropping upon the feet *on to the Table.* In each succeeding attempt the "Man up" can be removed to a farther distance from the spring-board, until ultimately you feel that you may attempt the whole distance as described above. The "Man up," by the way, must preserve a good stiff and even back, and be careful not to flinch or give way when the leaper's hands are upon him. The "REVERSE FLY OVER MAN UP" is a smart bit of work, and as the position of the "Man up" has a great deal to do with its success, we will ask him to turn around, facing the mattrass, still keeping upon the knees, and with the hands upon the far end of the Table; he must be prepared for a little shock from the leaper, and maintain a good hold. The gymnast must now follow out the directions of the preceding exercise; but as his hands push the back of the "Man up," he must twist his body sharply to the left side, at the same time extending his legs wide, and he will clear the man and drop upon his feet on to the mattrass.

THE TABLE.

Fig. 18.

The "FEET THROUGH OVER MAN UP" requires, as we may imagine, plenty of "go" to get over; but it is such a very pleasing feat that it is worth while to endeavour to learn it. As in the "Frog Leap over Man up," it will be best to attempt it by easy stages. We therefore advise the "Man up" to be placed close to the near end of the Table, and, taking a rapid run, strike the spring-board near to the top. On touching the back of the "Man up," you will have to press or push downwards with the hands. This will have the effect of bringing your knees and feet upwards, passing over the man's back, and alighting upon the feet on the Table. On passing over the man's back, it looks effective to assume a hollow-back position. The "Man up" must now remove his position farther away from the front of the Table, until he is a couple of feet from the end, when you may make the attempt over him, and the whole distance. Some men are particularly good at leaping feats of this kind, so we set them the "FROG LEAP OVER MAN STANDING," which is one of the finest exhibitions of agility that we know of, and one that always pleases the British public at displays. The "Man up" should stand in the centre of the Table, with his right foot about 18 inches forward, the feet at right angles, the right knee bent, and the left leg stiff. The arms should be folded over the chest, and the head bent forward. The leaper must now endeavour to perform the "Frog Leap" from the spring-board over the man standing, placing his hands upon his shoulders *en route*. The best way to learn this is for the "Man up" to *gradually raise* himself to the required height.

THE TABLE.

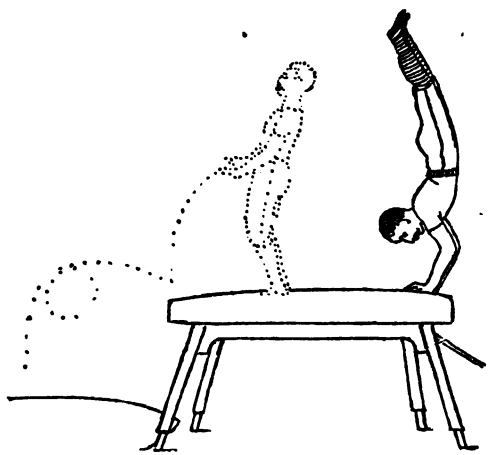

Fig. 19.

In the "HAND-SPRING ON" it is necessary that you should be able to do a hand-spring upon the ground. The next thing to do is to simply roll over on to your back upon the Table, catching hold of it with the hands while doing so. When you have accustomed your self in this way to your whereabouts, you might take a moderate run, striking the spring-board with the right foot near to the top, the left being about the centre. Placing the hands upon the near end of the Table, you now attempt the "Hand-spring on," being very careful to give a very smart push from the hands (see Fig. 19) to bring you upon your feet (see the dotted figure in Fig. 19). When you can make some shape at this, an increased speed in the run will help you, and prepare you for the "HAND-SPRING ON AND OFF." In this, when you arrive at the position of the dotted figure in Fig. 19, endeavour to do so with the hands above the head, so that it may be in position for the "Hand-spring off;" and to come off in this way you have simply to place your hands at the far end of the Table, and turn, as described in Fig. 5. The "HAND-SPRING ON AND FORWARD OFF" is a more difficult piece of work, and consists of turning a hand-spring on to the Table, and immediately upon alighting on to your feet, to turn a "Forward Somersault off." The "Hand-spring" should be practised repeatedly until *you feel* you are tolerably sure of the somersault, when you may attempt it as described in Fig. 9.

THE TABLE.

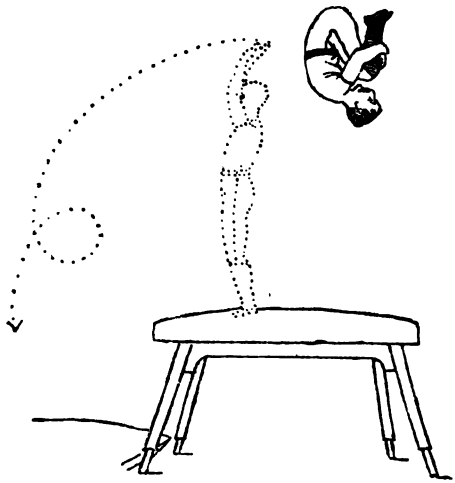

Fig. 20.

The "FORWARD SOMERSAULT ON" requires plenty of nerve, and before attempting it you must be able to throw a good forward somersault off the spring-board and over the Table. If you can do this, the feat we are about to describe will not appear so formidable. Take a rapid run and strike the spring-board, with both feet together, a little above the centre. Endeavour to rise in your somersault as high as you can, and in the direction of, and above, the near end of the Table (see Fig. 20). When you have turned, open your eyes, and be on the alert to drop upon the Table safely. Of course we have described the movement as applied to an ordinary forward somersault; but sometimes men have peculiarities of turning too far or too near; but these individualities you must find out and carefully consider in relation to the above movement yourself, and take, by all means, the precaution of having assistants around to catch you if you should slip off after alighting. After you have mastered this thoroughly, you may attempt the "FORWARD ON AND FORWARD OFF"—that is to say, a Forward Somersault on to the Table, and a Forward Somersault off again without any pause. In this you must endeavour to drop in your first "Forward" about 18 inches from the far end of the Table, with the hands above the head (see dotted figure in Fig. 20), so that you may be ready to turn your second "Forward" immediately upon alighting in the direction indicated by the dotted line in Fig. 20.

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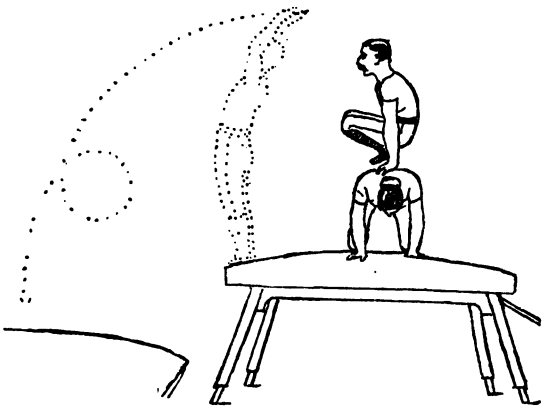
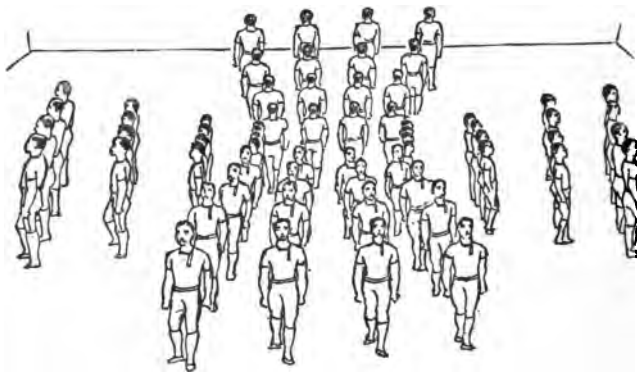


Fig. 21.

The "FEET THROUGH AND FORWARD OFF" (see Fig. 21) is one of those puzzling movements that sometimes make us hesitate in making up our minds to learn them. This is owing to the contradictory positions entailed. Here, in the first place, we have a close, compact position of the body; and in the second an extended position, ready to make a third and entirely different position; but in this, as in all difficult movements entailing changes of position, we advise that the exercise should be divided into parts and practised separately. We find if the "Man up" is about a foot from the near end it is very satisfactory, as it gives time to collect your thoughts for the "Forward off." Another perplexing but brilliant piece of work is the "FROG LEAP OVER MAN UP AND BACK OFF." In this feat you place the "Man up" just before the centre of the Table, as in Fig. 21, taking a rapid run, and springing from the top of the spring-board, you perform the Frog Leap over the "Man up" with the body in an upright position. On alighting upon the Table on to your feet, make a half-turn round, facing the spring-board, and turn a "Back Somersault off," as described in Fig. 10. Take all possible precautions against any slip. This concludes our remarks upon the Table, leaving still a wide field for the ingenuity of the skilled gymnast.



HEAVY CLUBS.

Heavy Club movements, while not so beneficial as a means of exercise as the lighter ones, may be regarded as a result of what can be attained by physical development, and it is always a favourite item at "Displays," shewing that people retain the passion for exhibitions of purely physical strength. It is needless to say that Heavy Clubs look best when performed by heavy men; for although we have seen an occasional lightweight perform tolerably well with them, it was always apparent that he did so with great exertion and risk of straining himself, for the weight of the club would naturally pull him off his balance, and his efforts to retain would not be graceful. On the other hand, no one could fail to notice the ease and admire the grace with which the more powerfully built man wields the heavy objects, as though they were as nothing in his hands. Some men adopt different methods of making the clubs weighty, hollowing the base end of the clubs, and filling them with lead, &c.; others have enormous clubs turned and hollowed out. Both of these courses are objectionable; it is far better to have them turned to the weight you think you can manage. They range up to 56 lbs. at the Liverpool Gymnasium, and we have seen John Hulley, its famous founder, and our distinguished mentor, wield it simultaneously with a 48 lb. with apparent ease. Amongst other well-known "club" men, Mr. Spencer Leese, F. W. Schofield, and J. E. Davies, of the Liverpool Gymnasium, ranked high; as also did J. V. Madgwick, of the Bolton Gymnasium, and P. Carroll, late of the Manchester Gymnasium.

HEAVY CLUBS.

Fig. 1.

Movements with clubs weighing about 30 lbs. each look well if performed slowly. Holding the "ARMS PARALLEL AND CLUBS PERPENDICULAR" is one of them. LET the feet be about 18 inches apart, the toes pointed outwards, the legs stiff, and the body erect, making up your mind to obtain a firm position on the ground with your feet. In bringing up the clubs for work, it is best to do so from the rear, *i.e.*, allow the base of the clubs to rest upon the ground a few inches behind the feet. THEN grasping the handles, with a swing bring up the clubs to the chest, arms bent, elbows pressed against the sides, clubs perpendicular. Now slowly extend the arms forward until they are parallel and horizontal, the clubs still being perpendicular (see Fig. 1). From this position you can bring the clubs back to the chest again, or if you are strong enough, you can raise them until the "ARMS AND CLUBS PERPENDICULAR" position is reached. In doing this, lean the body slightly back, and at the same time raise and extend the arms upwards until above the head (as in Fig. 2); the arms must be kept perfectly stiff in this movement. Now bring them back steadily to the position of Fig. 1 again, and afterwards down to the ground. "TOUCHING THE SHOULDERS" is a very good exhibition of strength. In this movement, you raise the clubs into position of Fig. 1, and from here you allow the base ends of the clubs to steadily lean over until they touch the shoulders, the arms being kept stiff, and the movement made from the wrist. Resume position of Fig. 1, and then to starting point.

Fig. 2.

HEAVY CLUBS.

Fig. 3.

Twisting movements with heavy clubs are rather difficult, on account of their bulk and propensity to strike against each other, but if the gymnast is skilful as well as strong, this may be prevented. The "ALTERNATE BACKWARD TWIST" is the first and easiest of these movements. BRING the clubs to the chest, and having secured your balance, perform a Backward Twist behind the right shoulder with the right club (see Fig. 3), and on reaching the chest again, perform a similar movement with the left club behind the left shoulder, and so on alternately with the right and left clubs until the movement is a rapid one, and one that looks exceedingly well. The "SIMULTANEOUS BACKWARDS TWIST" is more difficult, and requires a nicety of effort with both arms simultaneously, or else the clubs will strike against each other, and prevent the circle being accomplished. BRING the clubs to the chest, and allow the base of each club to fall inwards as indicated by the dotted lines in Fig. 4, performing a Backward Twist with each club. Endeavour to aim at crossing *the handles*, and it becomes easier. A little practice should enable you to do this successfully, and without a pause. A good movement, but requiring a great effort, is the "SIMULTANEOUS BACKWARD AND FORWARD TWIST." In this you perform a Backward Twist with the right hand, and a Forward one with the left hand behind the shoulders. Other movements may be performed from the Light Club exercises described in Part I. of Modern Gymnastic Exercises, but those that we have just described will form the groundwork; the rest must depend upon the physique and strength of the worker.

Fig. 4.

HEAVY CLUBS.

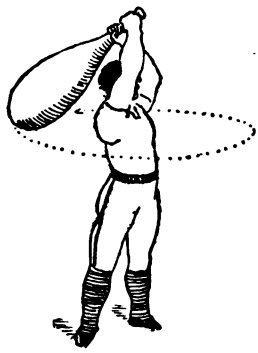


Fig. 5.

One of the best methods of showing off Heavy Club-work to advantage is with the single Heavy Club, weighing between 50 lbs. and 60 lbs. With a club this weight even the "CIRCLE AROUND HEAD WITH BOTH HANDS" looks a fine exhibition of strength. RESTING the base of the club between the feet, and catching hold of the club with both hands, you raise it into the perpendicular position above the head (see Fig. 2). From here you allow the base of the club to gradually fall between the shoulder-blades, keeping the arms as stiff as you can. When the club is at the rear, swing it in a horizontal circle around the head, as indicated by the dotted line in Fig. 5. The "BACKWARD TWIST AND SWING" is good practice, and should be practised with the left as well as with the right hand. COMMENCING with the left hand, you bring the club to the chest, and, swinging it past the right shoulder, you allow it to drop past the right leg; and, taking advantage of the impetus gained in this way, you pull it up over the left shoulder, and, without any pause, perform a backward twist (see Fig. 6). You now change the club to the right hand, and repeat the movement. The "BACKWARD AND FORWARD TWIST ALTERNATELY" is another severe test of the strength. Commencing with the left hand, you raise the club to the chest, and perform a backward twist, as in Fig. 6; and then, passing the club across the chest to the right hand, you perform a forward twist, after which you extend the right arm sideways, swing the club downwards across the front, and lift it up to the chest at the left side, where you resign the club to the left hand again, and repeat the movement.

Fig. 6.

HEAVY CLUBS.

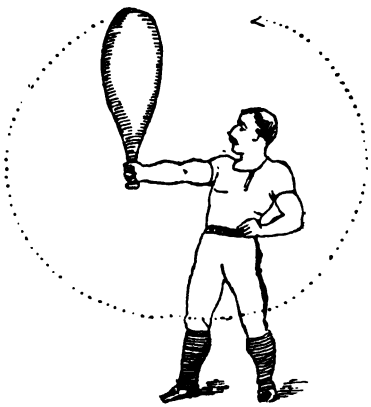


Fig 7.

Swinging movements with the Heavy Club can be greatly facilitated by the counteracting weight of the body. Thus, when the club is at the extreme front, the body should be thrown well back; when the club is behind, the body should incline forwards. A little practice will show the usefulness of this. In "THE TWO-HANDED SIDE-SWING" this is particularly noticeable. GRASP the club with the hands, and bring it to the chest. Now extend the arms forward, club perpendicular, as in Fig. 1. From here swing the club downwards to the right side; then upwards, past the right shoulder, to the starting point again. Then swing downwards to the left side, upwards past the left shoulder, and to the starting point, repeating the movement once or twice. The "ONE-HANDED SIDE-SWING" is similar to the last movement, only performed with *one* hand (see Fig. 7). The "FORWARD TWIST AND SIDE-SWING" is a difficult piece of work, the difficulty being the Forward Twist. Bring the club up to the chest with the right hand, and, pressing the elbow well to the side, perform a Forward Twist. On the club coming round, thrust the arm out straight before you, and swing the club downwards past the right side, and upwards past the right shoulder, to the chest. Here change the club into the left hand, and repeat the Forward Twist and Swing.

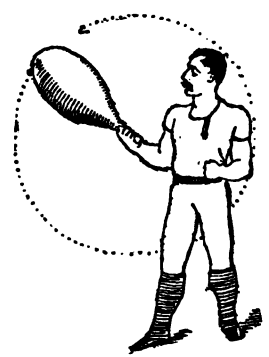


Fig 8

HEAVY CLUBS.

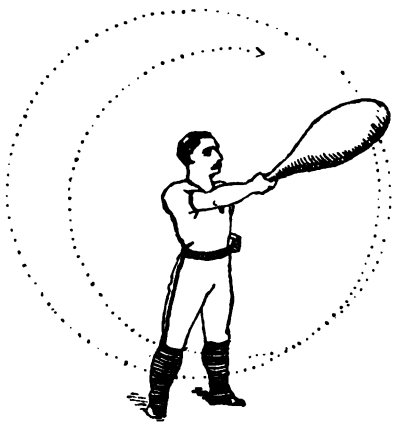


Fig. 9.

The "CHANGING SIDE-SWING" consists of bringing up the club to the chest with the right hand, and thrusting it before you at full extension of arm (see Fig. 9), swing the club downwards past the right side, upwards and past the right shoulder, forwards to full extension of arm. Here extend the left arm forwards, and pass the club into the left hand, and with it swing the club downwards past the left side, upwards and past the left shoulder, to the front, where you pass the club to the right hand again and repeat the movement. The "BACKWARD TWIST AND SIDE-SWING" is a similar movement, but a little more difficult. BRING the club up with the right hand to the right shoulder, and perform a Backward Twist behind the right shoulder. On the club coming round, swing the club forwards at full extension of arm, and continue downwards past the right side, upwards past the right shoulder, and across the chest to the left shoulder. Here pass the club into the left hand, repeating the movement with the left hand. When the club comes to the chest it can be passed alternately to the hands. It would serve no useful purpose to describe any more Heavy Club-work, since we would probably only obtain it from the Light Club exercises described in Part I. of this work. In conclusion, we advise gymnasts not to endeavour to use clubs beyond their strength, and to remember that the exercises are spectacular rather than beneficial.

HEAVY BAR-BELLS.

The Heavy Bar-bell is a couple of large iron balls connected together by an iron rod about five feet long and one inch in diameter. The weight generally goes up to 200 lbs., but the weight of the Bar-bell described in our woodcut is 120 lbs., that being the weight with which we performed the feats herein described. The Heavy Bar-bell is, in our opinion, a much more appropriate apparatus for exhibiting muscular strength, it being more evenly balanced. It does not drag you over on to one side like the Heavy Club; for this reason, light gymnasts can, if they are strong, participate in the practice of the feats successfully. In fact we have seen light, strong gymnasts perform with the Heavy Bar-bell all that we have seen accomplished by heavier men, and equally as well. It looks best performed in conjunction with the Heavy Clubs, and no item shews the result of physical training so forcibly as three or four well developed muscular men performing the Heavy Clubs and Heavy Bar-bells. We need scarcely point out again that the exercises described here are not beneficial, but intended simply to shew the result of acquired strength; and if you have not the necessary strength, the Heavy Bar-bell should be avoided, and practiced with a lighter one until the necessary muscle is obtained. Another method of practising the Heavy Bar-bells is to do all the feats "double-handed," viz., by two gymnasts instead of one; by this means of course all possible strain is avoided, and a greater variety of feats can be performed. In this case the gymnasts work side by side, and do everything simultaneously; and very well it looks to see a couple of well-built athletes exercising with a Heavy Bar-bell in this way.

HEAVY BAR-BELLS.

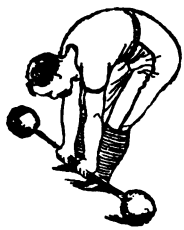


Fig. 1.

In using the Heavy Bar-bell as an exhibition of physical strength, it is best to do all the feats slowly if possible, and in order to do this there are several points to remember that we will briefly mention. In the first place, the position of the body should be carefully studied; the feet should be a little apart, to form a base for the body, with the toes pointing outwards to better preserve the balance. The centre of gravity should always be obtained in catching hold of the Bar-bell, and before attempting to lift it; otherwise an unequal strain will fall upon one arm, and thus court failure. Again, the body should be utilised as a lever when possible, and the muscles of the arm generally economised. "LIFTING THE BAR-BELL" will explain better what we mean. BEND from the waist and grasp the Bar-bell at equal distances, dividing the Bar into three equal parts (see Fig. 1). Now straighten the legs, and assume an erect position, keeping the arms stiff, and resting the Bar-bell against the thighs. By this means the muscles of the arms have been economised, the work having been performed by the *abdominal* and minor muscles of the back and muscles of the thighs. Now lift "THE BAR-BELL UP TO THE CHEST," getting the elbows well under it as soon as you can, so that they may act as supports (see Fig. 2). If you cannot get it into the position slowly, a quick turn when the Bar-bell is a little above the waist will no doubt assist you. If two are working the Heavy Bar-bell here it looks best to bring the Bar-bell from the waist up to this position very slowly; it will shew off the strength to much greater advantage by doing so.

Fig. 2.

HEAVY BAR-BELLS.

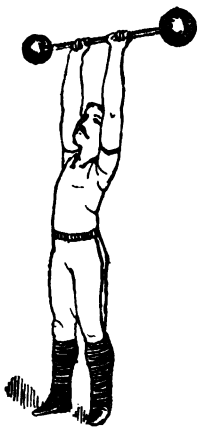


Fig. 3.

You are now in the most favourable position for "LIFTING THE BAR-BELL ABOVE THE HEAD;" lean, therefore, slightly backwards, and keeping the elbows well under, push the Bar-bell steadily and slowly above the head. It is of course easier to push it up quickly, and easier still if, when making your effort to push up, you bend your knees, taking advantage of this descent of the upper part of the body to straighten the arms *under* the Bar-bell. Now straighten the knees, the muscles of the thighs will thus have done the principal part of the work. After lowering the Bar-bell slowly upon the ground, "THE QUICK LIFT ABOVE THE HEAD" may be performed by way of comparison. Catch hold of the Bar-bell, dividing it into three equal parts, as in Fig. 1, getting the toes well under the Bar-bell; now with a good effort bring it up to the chest, and getting the elbows well under it, give it a good push until above the head. If you find the effort too much, you can assist yourself greatly by bending the knees as you are endeavouring to push up the Bar-bell above the head. When you get it there, stiffen the knees immediately. From this position you can close the heels together and turn steadily around in "Right turn," or if you feel strong enough you may be able to walk about a little with the Bar-bell aloft. In bringing it down, do so quietly, first lowering it on to the chest, and from there on to the ground. If the feat is performed by two athletes, all that we have described must be performed very slowly and quietly, thus shewing that you have the weight completely under control, that it is, in fact, a trifling matter with you.

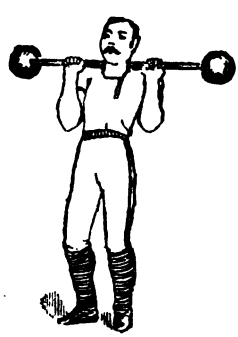


Fig. 4.

HEAVY BAR-BELLS.

Fig. 5.

We must say at once that we do not suggest to perform the feat depicted in Fig. 5 with a Bar-bell weighing 120 lbs. We fear that if we did the result would be rather disastrous to our knees and toes. The size of the Bar-bell must, then, be placed to the artist's taste, who no doubt thinks it looks better. "HOLDING THE BAR-BELL IN FRONT" with a 60-lb. Bar-bell has been our custom, and we found it quite enough. The feat is generally performed by grasping the Bar-bell as usual in three parts, lifting it up to the chest, and thrusting it steadily forward, leaning back at the same time from the waist, until the weight is over the toes. Or a better looking way to perform it is to first lift it above the head, and from that position, keeping the arms stiff, gradually lower the Bar-bell until it is opposite the chest, bending backwards at the same time from the waist. In placing the Bar-bell down pull it in towards the chest, and from there lower it steadily to the ground. "LAYING DOWN WITH THE BAR-BELL" is perhaps the most difficult feat of the Heavy Bar-bell series. This consists, in the first place, of lifting it above the head as in Fig. 3. From this position you lower it until it reaches the chest; you then sink in a sitting position by bending the knees, as in Fig. 6. Now extend the left leg forwards, and sit down behind the right heel, extending the right leg forwards. Now, resting the elbows against the sides, you lay upon your back, and endeavour to push the Bar-bell above your face. To get up, you incline the Bar-bell forward—this will bring you into a sitting position. Now bring the Bar-bell to the chest, bringing first the right and then the left foot up until you resume position of Fig. 6. From here you again stand erect.

Fig. 6.

HEAVY BAR-BELLS.

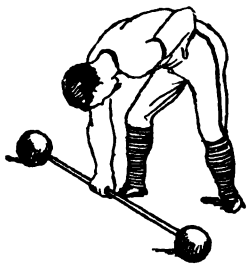
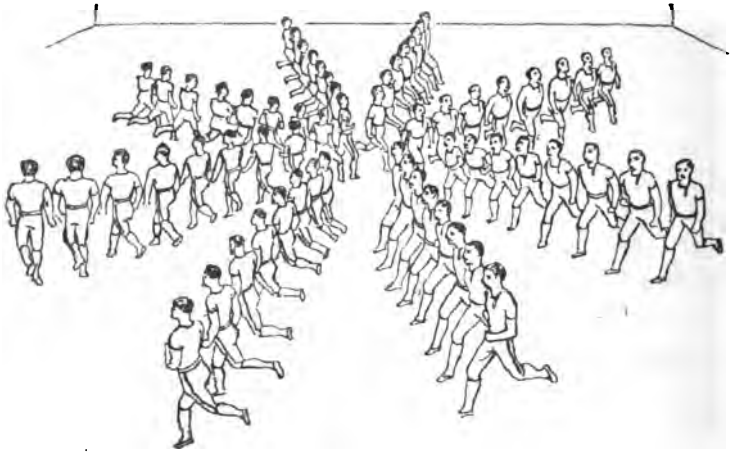


Fig. 7.

Fig. 8.

Fig. 9.

"RAISING THE BAR-BELL ABOVE THE HEAD WITH ONE HAND" is a feat that requires no little strength, and, we may add, balance also, for once you get a little on one side, you may as well give up the attempt. IN this feat you bring the right foot slightly forward, the feet being at right angles. You now bend forwards, and grasp the Bar-bell in the exact centre, with left hand on the hip (see Fig. 7). Now, with a good effort, bring the Bar-bell to the chest, keeping the right elbow well against the side (see Fig. 8). Now comes the principal effort, viz., to push the Bar-bell above the head. In attempting this, get the palm of the hand well under, and leaning slightly back, endeavour to push the weight up; and here a slight bend and push from the knees will help you. Once the Bar-bell is up, assume the position of Fig. 9. In getting the weight down, bring it steadily to the chest, and from there steadily to the ground. A very difficult feat is, when in this position, to bring the right foot and the left hand behind the left foot, thus throwing all the weight upon the left leg and right foot—a very pretty position; you may also stand upon one foot only, or, finally, you may walk a few paces with the Bar-bell held aloft.



THE CLIMBING ROPE.

A knowledge of Rope Climbing is one of the most useful gymnastic exercises that we can practise. To climb a rope should be taught to everyone, and many a life would have been saved if, in case of fire, for instance, a coil of rope had been handy, which, easily fastened on to a bedstead, would have afforded a ready means of escape, especially if a knowledge of climbing was acquired. Rope Climbing, like swimming, is a very tiring exercise when we do not do it correctly, and the common fault in both exercises is that the arms are used too much, and the legs and feet too little. Many of us, no doubt, remember the French girl gymnast who performed at the Crystal Palace some years ago, and who used to go up and down a rope incessantly without any apparent effort, to the mortification of her numerous imitators, whom she challenged with unvarying success. In this case the legs did almost all the work, the rope passing between the thighs, under the left hock and over the left instep, the rope being gripped by the right hock, and the right heel over the left instep. In climbing, the upward movement of the legs should be made as much as possible from the waist without using the arms unnecessarily. In "HAND OVER HAND" climbing there is no golden rule beyond keeping time, and pulling in to the pectoral muscles each time an upward pull is made. H. J. Dartnall, of the Southampton Gymnastic Club, and R. Brunton, of the Liverpool Gymnasium, both weighing over 12 stone, were two of the best "Hand over hand" climbers we have seen; as were W. H. Jackson and Dr. Gough, of the same institution, for light weights. One of the most difficult methods of Rope Climbing is the inverting position upon the double ropes.

THE CLIMBING ROPE.

Fig. 1.

In the UPWARD JUMP upon the double ropes, you catch hold of each rope—the ropes being inside the arm, not outside as shewn by the artist—and circling over until the feet are over the chest, you bend the knees close to the body and give a perpendicular shoot with the feet between the ropes, as shewn by the dotted figure in Fig. 1, supplementing it with a good pull with the arms. You will find the shoot with the feet takes the weight of the body off the arms for a moment. Opportunity should be taken of this to remove the hands a little higher, and so on until some distance has been climbed. In this movement a slight weight should be placed at the bottom of each rope, in order to straighten them, thus allowing the hands to slip upwards more easily.

Fig. 2.

DESCENDING WITHOUT THE HANDS is useful, as it enables you to rest the arms. In this you entwine the rope behind the right arm, around the right leg, and hold it in position with the left foot, see Fig. 2.

Fig. 3.

DESCENDING HEAD FOREMOST is not difficult, and *looks* a daring feat. To do this you circle up, passing the rope from the left side under the right arm, across the body, through legs, around right leg and over right instep, securing it with the left foot, with which you regulate the descent; a weight at the bottom of the rope will be useful here also.

THE ENGLISH BOARD.

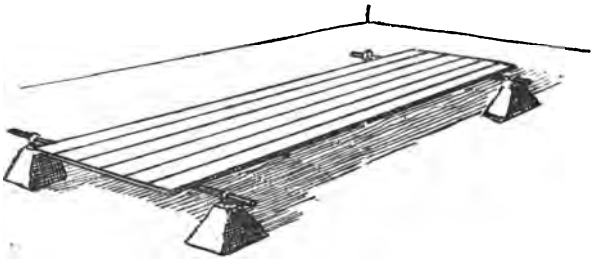


Fig. 1.

The English Board is a useful acquisition in a gymnasium; and as its construction may not be generally known, we may state that it is an ordinary spring-board in make, perhaps a trifle wider. A good size is 5 feet long by 3 feet 6 inches wide. It should rest on a bar at each end, which, in turn, rest upon four stands about a foot high. The bars should be fastened to the stands by rings, wide enough, however, to give the bars play to and fro, as the board springs with the work upon it. A little carpet over the board would make it a little more comfortable in dropping. The exercises are principally intended for the lower limbs, and much interesting work can be done upon it. Knock-knees and flat feet ailments are often cured by its practice; while it gives a grace and balance to the movements which is much to be desired. It also makes a good item in a "display" programme, in which case a class should go through some easy work, such as we will describe, when comparisons may be drawn showing that, paradox as it may seem, easy work is sometimes difficult.

THE ENGLISH BOARD.

Fig. 2.

"THE STRAIGHT JUMP" is excellent practice for the ailments we have mentioned. STAND in the centre of the board, facing one end, with the heels together and toes pointing outwards. Keep the body rigid, and place the hands upon the hips. Now, maintaining this erect position, spring from the balls of the feet a little distance in the air, descending in the same erect position, and rebounding a little higher with the return spring. This should be done several times, gradually increasing the height of the jump. When you are able to get the full benefit of the spring-board for your jump, and can get fairly high, you might attempt to draw the knees up to the chest, catching hold of the feet with the hands while in the air (see Fig. 2); but this must not be done until you are some distance from the board. After holding the feet for a moment, loose them and descend as before. "THE BACKWARD JUMP" is good practice for the abdominal muscles, and a very graceful movement as well. START from the centre of the spring-board as before, and in jumping bend backwards from the waist, the head and heels well back, and the arms over the head (as in Fig. 3). Vary by endeavouring to perform Figs. 2 and 3 alternately, taking care not to exhaust yourself, for the exercise is very tiring. Very good practice can also be obtained by working upon the spring-board in pairs—*i.e.*, a couple of gymnasts practising simultaneously, care being taken to *keep time* in the movements, otherwise you will not be able to get the correct spring from the board.

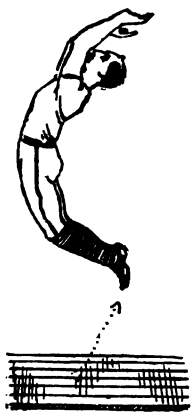


Fig. 3.

THE ENGLISH BOARD.

Fig. 4.

THE FORWARD JUMP is perhaps the most difficult of the jumps, but it is excellent practice for the muscles of the waist. In attempting it do not endeavour to get too high at first, and obtain the position gradually also. START from the centre of the board as usual, and when in the air in a straight jump endeavour to bring your feet forwards, bending from the waist only; at the same time bring your hands forwards in the direction of your feet. After a little practice you will be enabled to touch your feet with your hands (see Fig. 4). After the position is obtained, resume, and alight in the straight jump. Endeavour now to perform the straight Backward and Forward jumps alternately. The "Pirouette" is not easy, and must first be practised upon the ground, the object being to spring from the ground upwards, and make a complete perpendicular turn in the air before you alight upon the ground again (see Fig. 5.) In attempting this from the ground you start from position of "attention," and slightly sinking from the knees, you spring upwards in the air, and at the same time obtain a good turning impetus by the aid of the right arm, which throw around the left side. It is a little more difficult from the board, and should be practised cautiously and gradually. When you can manage it all right, reverse the turning alternately. If two are practising at the one time, they might commence by holding hands and facing each other. Then each turning a Pirouette can face each other again.

Fig. 5.

THE ENGLISH BOARD.

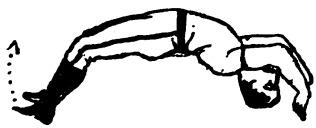


Fig. 6.

Before attempting "THE BACK SOMERSAULT," you must be able to perform that feat in good style upon the ground, and as it is usually performed in a "doubled-up" position, you must also attempt it in a hollow-back position, which you will find rather strange at first. The turn should therefore be tried with the lungers on. IN attempting it upon the spring-board, spring upwards as if going for a straight jump, supplementing the effort by throwing the head and shoulders well back, with chest well out, and back hollowed. Although the first attempt will be found very difficult, when it can be accomplished it will be found more simple than the "doubled up" back somersault, looking too, very much more graceful. In learning it take the proper precautions. Several of these somersaults can be thrown consecutively, and look very well. "THE FORWARD SOMERSAULT" will be found very difficult, and none but a smart "Forward Somersault" thrower need attempt it. SPRING as for a straight jump, with the hands over the shoulders; when you get as high as you can, bring your head forward, your knees to your chest, and catch your ankles sharply with your hands. Difficult as this may seem, we have seen Mr. George Craig, of the Leicester Gymnasium, perform four Forward Somersaults consecutively on the bare ground; and upon another occasion, twelve Backward Somersaults consecutively, shewing what can be done if one really goes in for feats of this sort; but even if our readers may not care to risk their bodies too much, they will, in the simpler feats at least, get plenty of good, exhilarating exercise.

PYRAMIDS.

Pyramids, in the sense intended here, consists of men climbing on top of each other in such a way as to form various figures and shapes. There being a base upon which the centre of gravity is supported, it has a most useful object in its practice, for by it men are enabled to climb up heights and over obstacles that might be necessary, and that would prove most formidable to the unpractised. For this reason we consider it should be largely practised by our army, who are often thrown into positions of difficulty during warfare, when a knowledge of mounting men's shoulders, as in Fig. 3, should prove very useful. It is also a most popular practice, being always liked when properly directed by a skilled hand. It is also a most beneficial practice, for it exercises nearly all the muscles of the body, and in some of the figures, requires an amount of strength, coolness, and discipline that should be highly appreciated by those who are fortunate enough to possess them. The chance of "croppers" is limited also, and is generally caused by *one* weak spot at the base of the human masonry, resulting, in most cases, in collapse and laughter. If any awkward falls do happen, it is principally through the determination of one of the "bases," as in Fig. 3, to hold those above him through "thick and thin," and an equal determination on the part of the weak-kneed one above to fall. The Pyramids are also a most useful item in a "display," as a display of strength, agility, and endurance.

PYRAMIDS.

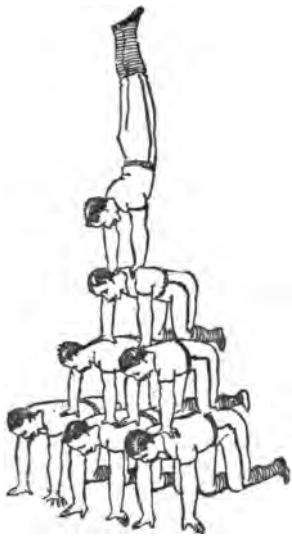


Fig. 1.

For the sake of example, we will select a class consisting of eight men to go through the Pyramids, it being an easy number to obtain from almost any gymnasia; and if you have choice of men, obtain four strongly made to act as "bases" or "bearers"; three of lighter build to act as "mounters"; and one light-weight to act as "top mounter." When these are selected they should be "numbered off," the four bases being numbered 1, 2, 3, and 4, the three mounters 5, 6, and 7, and the top mounter No. 8. Now let us attempt our first experiment, which we will do with seven, No. 1 being selected to look after them. The class should stand in one line, and at the word of command—"KNEES ALL"—Nos. 2, 3, and 4 should immediately kneel down side by side, making a square, level back, and extending the arms and knees outwards slightly, in order to obtain a firm position on the ground. When this position is formed, Nos. 5 and 6 should immediately follow, and mount the "bases'" back, kneeling upon them by placing a hand and knee upon the outside "base," and a hand and knee each upon the centre "base," who, by the way, should always be the strongest man. No. 7 should now mount and kneel upon the backs of Nos. 5 and 6, and finally No. 8 should mount and kneel upon the back of No. 7; and, if he is a clever gymnast, he can also perform a Hands-balance upon the shoulders of No. 7 (see Fig. 1). In dismounting, the topmost man should get off first, No. 7 next, Nos. 5 and 6 next, and finally the "bases" rise up. All this should be done very smartly, to look well.

PYRAMIDS.

Fig. 2.

Our next experiment will be with six of the class, Nos. 4 and 5 standing out to look after them, the others standing in one line. At the word of command, "THREE HIGH BY SIX," Nos. 1, 2, and 3 should immediately kneel down as in last exercise, No. 6 and 7 following suit by kneeling upon them as before, No. 8 following by mounting and kneeling upon Nos. 6 and 7, thus making the figure that of "Knees all." From this position the "bases" gradually raise first the left knee, and then the right off the ground, and put their feet in the place of them. Now they place the right hand on the right knee, followed by the left hand upon the left knee, and at the word "Rise" the "bases" should stiffen the knees (see "bases" in Fig. 2). All this should be done quietly, without disturbing the level of the backs, and without disturbing the equilibrium of the "mounted ones," who must meanwhile "hang on." Nos. 6 and 7 must now take their right knee off and place it on the right shoulder of the "bases" (see Fig. 2), following by placing the left knee on the left shoulder of the "bases." Then, placing their hands on their knees, they must stiffen. At this point No. 8 must kneel more forward upon Nos. 6 and 7. The "bases" now quietly rise up into the perpendicular position, and when nearly erect, extend the left hand over their head; this is grasped by Nos. 6 and 7, who, assisted by it, stand upon the shoulders of the "bases," thus standing erect. No. 8 now pulls himself and kneels, and finally stands upon the inside shoulders of Nos. 6 and 7, the figure now being completed. In getting down, the topmost men can either drop down first, or the group can resume the kneeling position, in which case the above directions must be reversed.

PYRAMIDS.

Fig. 3.

"THE THREE-HIGH PYRAMID" is a useful movement for escalading purposes, and should at first be practised close to a wall; but in this particular case we will describe it away from it, and with seven men, No. 1 being told off to assist and direct the others. In the first place, Nos. 2, 3, and 4 will form a base by getting into a small circle about 4 feet in diameter; their feet should rest against each other, and their arms interlace, so that their hands will obtain a support upon each other's shoulders (see position of base in Fig. 3). The bases should now bend their knees outwards, thus forming a step for Nos. 5, 6, and 7 to mount upon their shoulders. Only three parts of the mounters' feet should rest upon the bases' shoulders, the toes pointing outwards, and the heels together if possible, their shins resting against the backs of the bases' heads. They should now interlace their arms similar to that of the bases, and allow their foreheads to meet (see their position in Fig. 3); the bases, meanwhile, should stiffen their knees again. No. 1 will mount No. 8 upon his shoulders, who will from there step upon the bases' shoulders. The mounters will now bend their knees, allowing No. 8 to clamber up on to their shoulders. The bearers having stiffened their knees, No. 8 will gradually stand erect upon their shoulders. For a change he may stand upon his head upon theirs. In getting down, the top man, as usual, must slide down first, followed by the others. A good variety is made by, when all are standing, to open out the position, thus making an extended group all facing the front, similar to the direction of Fig. 4; it making, however, a more imposing group.

PYRAMIDS.

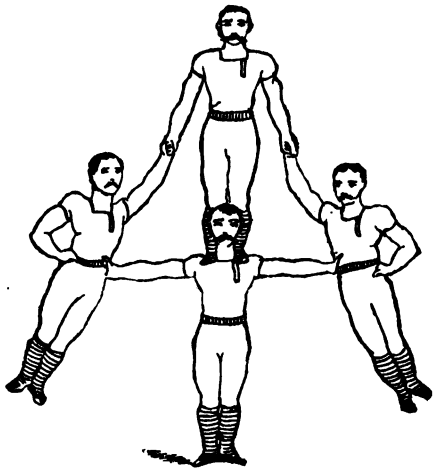


Fig. 4.

"BEARING AND HOLDING OUT" is a pretty group, and can be performed simultaneously by fours. We will, however, describe one four only, viz., Nos. 1, 5, 6, and 7. No. 1 will act as the "base," and in early attempts will find it very hard work. No. 5 will stand before No. 1 with his hands at his side, which No. 1 will grasp. No. 5 will now sink at the knees and spring upwards, the effort being supplemented by a good push upwards from No. 1. This will bring No. 5 on to the "bases'" shoulders, and is one of the easiest methods of mounting. The bearer should now obtain a correct foot-hold upon the "bases'" shoulders. This is done by allowing the heels to project off behind the shoulders; they should also be kept close, and the shins should rest behind the "bases'" ears. Maintain an erect position, and on no account lean back. Nos. 6 and 7, who are now standing at each side of the "base," should extend one hand upwards to the mounter, who, stooping, will grasp their hands. Simultaneously the "base" will place a hand against the sides of Nos. 6 and 7; and No. 5, stiffening his knees, will pull up Nos. 6 and 7 from the ground, as seen in Fig. 4. When used to the position the "base" can revolve around upon his feet, carrying the group along with him. If more than one four are engaged in making up groups, it looks very well for the groups to combine in arranging various figures, such as all facing one and alternate directions, revolving simultaneously, and so on.

LA COMÉDIE GYMNASTIQUE.

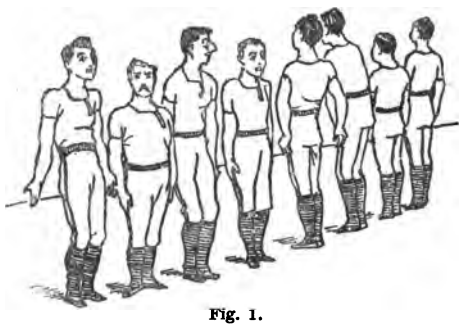


Fig. 1.

A little comedy is always acceptable, if not overdrawn. It exercises the facial muscles, and invokes a spirit of cheerfulness and amusement that gives a zest to our sober life. No novel is without it, and even tragedy contains it. We therefore propose to introduce it here, in the hope that it may prove useful at "displays." In the latter case the Director will previously have numbered his men, and arrived at an understanding with his "awkward squad." He might introduce them to the audience with a slight comment on the difficulty of getting pupils into form, especially during their "FIRST NIGHT IN A GYMNASIUM." Another method of producing this comic drill is to dress in grotesque costume, such as masks on the face, and also on the back of the head, with a little extravagance in dress, &c. Withdrawing to one side of the room, the Director gives the word of command, "Attention." The class instantly run into the centre of the room and attempt to come to the position of "Attention," the odd numbers, however, facing one way, and the even numbers the other, some with knees bent, heads forward, &c., the reverse of being correct (see Fig. 1). On seeing this the Director rushes forward, and, after considerable trouble, succeeds in getting them into some proper order.

LA COMÉDIE GYMNASTIQUE.

Fig. 2.

After having succeeded in getting the class into some sort of shape, the Director mildly reprimands them for their stupidity, and exhorts them to increased attention on their part. AT the word of command, "By twos," the odd numbers make one pace to the left the even numbers simultaneously making one pace to the right. At the words of command, "Even numbers one pace forward," the even numbers make one pace forward, thus forming two lines. Here the Director might give a slight dissertation on the benefits of having an agile frame; and at the words of command, "Right turn," both ranks "Right turn." At the word "Bend," the front rank bend forward, placing their hands upon the knees. At the word "Over," the rear rank perform the "leap frog" over the front rank (see Fig. 2). This may be again repeated. At the words of command "Left about turn," the lines or ranks will face the direction from which they came, and at the words of command will repeat the Frog Leap over a similar number of times, until they arrive at the starting position. The class might here go through some arm movements, taking care to do the exact reverse of the words of command given; for instance, the Director might give the words of command "Hands to the front," and the class would place them to the rear; or "Straighten the knees," the class of course bending them; or "Hands above the head," the class bending and touching the toes. The masks will lend delusion to the stupidity.

LA COMÉDIE GYMNASTIQUE.

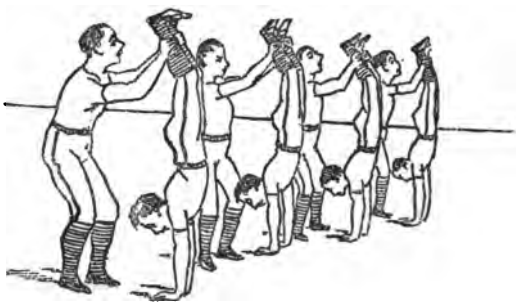


Fig. 3.

A few more remarks here from the Director to his class upon the benefits of being able to assume an upsided position, and its effect upon the arms, head, and spine generally. At the word of command—"Face"—both ranks turn inwards, facing each other. At the words "Arms up," both ranks raise their arms above their heads. At the words, "Odd numbers balance," the odd numbers will stand upon their hands, the even numbers catching hold of their feet and holding them in position (see Fig. 3). At the word "Down" the even numbers leave go with their hands, the odd numbers resuming their position on to the feet again. At the various words of command, the positions will be reversed, the even numbers standing upon their hands. Some fun can be caused by both ranks making awkward positions, and perhaps by one or two falling over on to their supporters; but in this latter case it must be pre-arranged, to prevent any unpleasant cropper. At the word of command, "Front," both ranks should again face to the front. A few words might now be given by the Director upon the "Antique," upon the glorious example they have left us, and upon our duty, especially that of the class, to worthily emulate them and fulfil their traditions. The class might then represent some of the tableaux in the Grecian statuary, and some fun is caused by the Director calling out the members of the class by the classical names of *Milo, Cyclops*, &c., &c., previous to the tableaux being arranged.

LA COMÉDIE GYMNASTIQUE.

Fig. 4.

The Director should here give a few startling words upon the nervous system, and the necessity of their becoming accustomed to positions of danger, so that their nerves might become gradually trained. At the words of command—"Right turn"—both ranks will make a "Right turn." At the words "Arms up," both ranks will get in a state of readiness, by holding up their arms above the head. At the words "Odd numbers balance," the odd numbers will stand upon their hands, and, overbalancing, will rest their legs upon the shoulders of the front rank, who, with outstretched arms, will hold their legs in position. At the word "Over," the front rank will pull the rear rank over their shoulders (see Fig. 4), until they alight upon their feet in front of them. It will now be the turn of the front rank to perform the Hands-balance and overturn on to the rear rank's shoulders, which they will do upon receiving the necessary words of command. The ranks will then receive orders to "Right about turn," and doing so, will repeat the Hands-balance, and overturn back again to the starting point. Another variety of comic movement might be given here instead of the last, viz., when in two lines the rear rank will receive the word of command "Balance," upon which they will, as before, perform the Hands-balance, but on resting their legs upon the shoulders of the front rank, the front rank will collapse, caused apparently by the weight of the rear rank's legs. In falling, the front rank should come into the sitting position, the rear rank rounding their backs—this will make the fall harmless

LA COMÉDIE GYMNASTIQUE.

Fig. 5.

The benefits of strengthening the calves of the legs and knee joints must here be explained by the Director, and at the words of command, "Even numbers one pace back," the even numbers will make one pace backwards. At the words of command, "Both ranks one pace inwards," both ranks will make one pace inwards, thus forming one line again. At the words "Hands on shoulders," the rank will prove distance by extending the arms in front and resting them upon the shoulders of those in front. At the words "Right knee bend," the rank will lift up their left legs in front, keeping the left knees stiff, and gradually sink upon the right foot (see Fig. 5). At the word "Rise," they will again rise erect. At the words "Left knee bend," the rank will raise the right leg in front and gradually sink upon the left foot. At the word "Rise," the rank will again rise into the erect position. A comical effect is produced by the rank raising up one leg in front, and hopping around the room, first to the right side and afterwards to the left in a circle, keeping time to the energetic entreaties of the excited Director. This is, notwithstanding its absurd appearance, capital exercise for the lower limbs. A variety of movement can be made when the rank is coming down in one line to hop sideways, first to the right and then to the left, or the odd numbers can hop to one side, and the even numbers to the other simultaneously.

LA COMÉDIE GYMNASTIQUE.

Fig. 6.

After getting the rank into proper position again, a short lecture might be given upon the need of graceful bearing in all their movements, describing the arms to be slightly elevated in front, the back hollowed, the left leg being elevated behind. At the words of command—"Left foot behind"—elevate the left foot behind, as in Fig. 6. Now, at the word "Bend," gradually sink upon the right foot. At the word "Rise," the rank will rise again into the starting position. At the words "Change right foot behind," stand erect, afterwards bringing the right foot behind. At the word "Bend," sink again, this time upon the left foot. At the word "Rise," rise again into an erect position. An amusing effect is caused by assuming the position of Fig. 6; and at the words "Right wheel, march," march around the room, first to the right, and afterwards to the left side. A firm hold should be kept on the shoulders in front, as there is a great inclination to loose hold, which, if done, rather spoils the effect intended. A change might be made by, instead of placing the hands upon the shoulders of the men in front, catching hold of their elevated foot, and hopping around in a circle in this fashion. On coming to the front the reverse leg should be elevated and the other foot seized. Endeavour to keep the line intact if possible, since if it is broken the intended effect is spoiled. The class must also be careful to preserve a becoming gravity in this drill.

LA COMÉDIE GYMNASTIQUE.

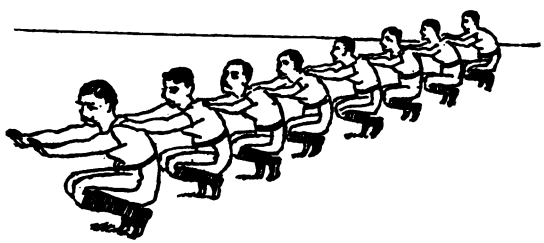


Fig. 7.

The Director must now give a rapid sketch of the great benefits obtained by a course of "The Crocodile's March," and, at the word of command "Rise," the class should rise upon the balls of the feet on to the toes. At the word "Bend," the class should steadily sink until in the position of Fig. 7. After this has been done a couple of times, and when in the position of Fig. 7, the Director should give the word of command "March," when the class—*preserving* the position of Fig. 7—should march out of the room to the accompaniment of suitable music, "The Funeral March of a Marionette" being very *apropos*. This will conclude these exercises. Although we have intended to give some amusement to those concerned, we have not neglected the giving of physical benefit also, the exercises chosen—especially the latter one—being exceptionally good, and indeed severe, as the "awkward squad" will find out. If the class feels inclined for more fun of this sort an exaggerated form of it can be arranged by the wearing of masks upon the back of the head, and one on the face also, the effect being very funny. In this case the whole of the Dumb-bell drill or the Swedish exercises can be gone through; the class, however, taking care to perform the exact opposite movement to that intended by the words of command given by the pompous and occasionally irate Director.

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